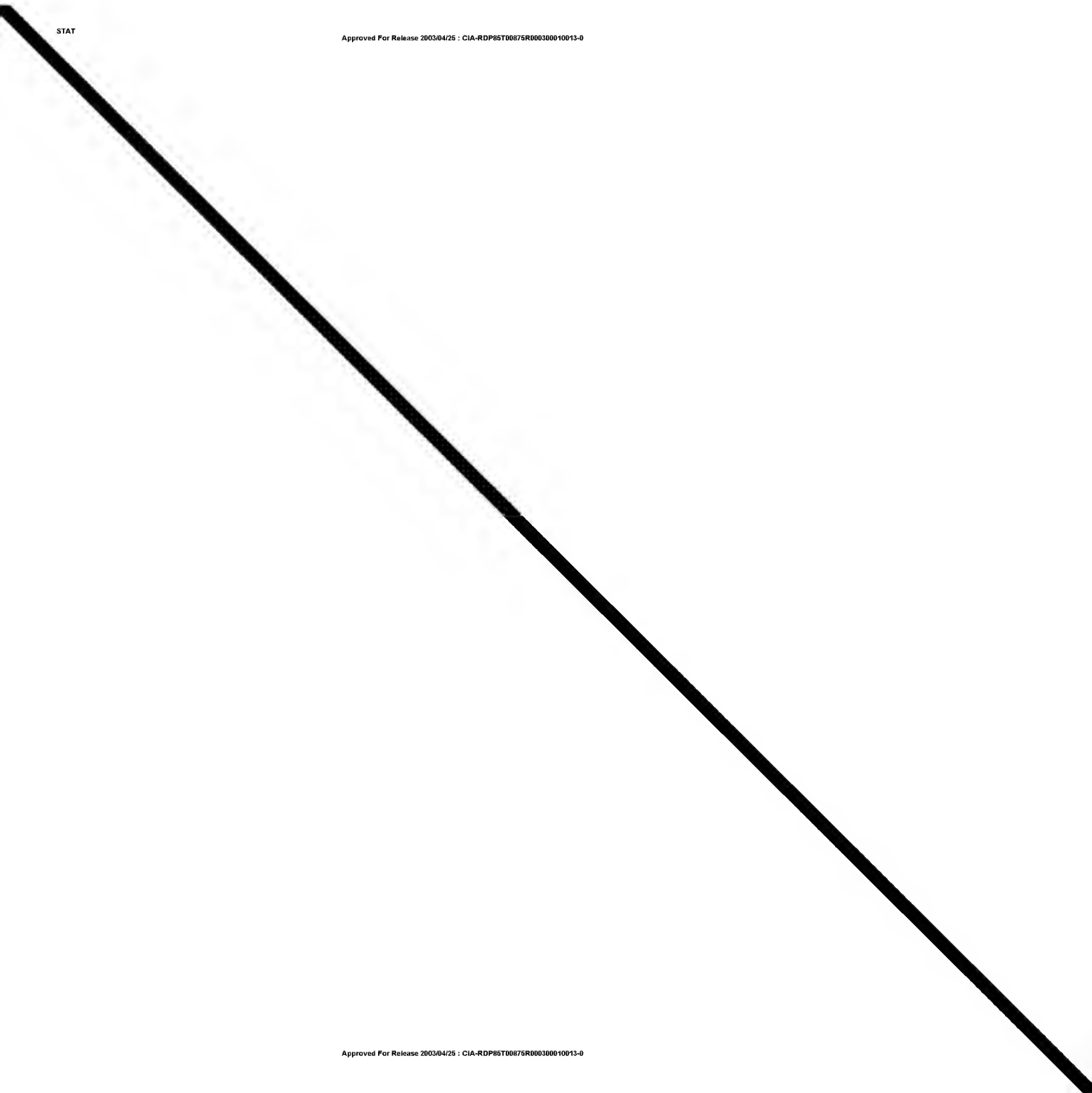

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CONTENTS

# THE 24th CPSU CONGRESS ON CURRENT PROBLEMS IN THE BUILDING OF COMMUNISM AND THE STRENGTHENING OF THE DEFENSIVE MIGHT OF THE USSR

Col S. Lukonin, Candidate of Philosophical Science;
Col A. Migolat'yev, Candidate of Philosophical Science

The 24th CPSU Congress was a signal event of vast political importance in the life of the Soviet people, the toilers of the brother socialist nations, as well as our numerous friends and supporters throughout the world. This highest party body unanimously and fully approved the political line and practical activities of the Central Committee CPSU, approved the proposals and conclusions contained in the Central Committee Report, ratified the Directives on the Five-Year USSR Economic Development Plan for 1971-1975, and elected party executive bodies. The congress summarized the achievements of the most recent period in our country's development and ushered in a new stage in resolution of the major tasks of building communism.

The Central Committee Report to the 24th CPSU Congress, presented by General Secretary of the Central Committee CPSU L. I. Brezhnev, as well as the proceeding of the congress persuasively demonstrated the eminent achievements of the toilers of the Soviet Union and the other socialist nations in building a new society, as well as radical changes in the world balance of power in favor of socialism and democracy. The congress resolutions attest to the fact that the party sees as its most important international duty the successful building of communism and strengthening of the economic might and defensive capability of the Soviet Union. The CPSU shows tireless concern for the welfare of the people.

The 24th CPSU Congress demonstrated our party's unswerving dedication to the ideals of Marxism-Leninism, ardent dedication to the revolutionary cause and the principles of proletarian internationalism. The entire proceedings of this forum of Soviet Communists was permeated with the spirit of Leninist high-principledness and efficiency; it displayed a rigorously scientific, innovative approach to solving the current problems of our country's internal development and complex international problems. Marxist-Leninist theory, which is illuminating the way toward the practical building of communism in the USSR and the world communist, revolutionary-liberation movement, received fruitful development at the party congress.

Our plans are plans of peaceful labor, involving the building of communism. At the same time Communists and all Soviet toilers are deeply aware of the close link between the tasks of successfully building communism and strengthening the nations's military might under the complex conditions of

the present-day international situation. As is emphasized in the Directives of the 24th CPSU Congress, the five-year plan "will ensure further increase in the defensive might of the Soviet Union, which will make it possible even more dependably to defend the Soviet people and all the nations of the socialist community against the threat of imperialist aggression, and will strengthen the position of the forces of peace and liberation throughout the world."

The building of communism comprises a profound, multifaceted process of transformation of all aspects of societal affairs: economic, sociopolitical, and spiritual. Historical materialism teaches that a determining role in their unity is played by the economic system. Socialist production is the point of departure of societal development, a decisive prerequisite for the social and cultural progress of society, improvement of interpersonal relations. The status of classes, nations and other social groups, their interrelations, just as the interlinks between city and village, intellectual and physical laborers, development of the political organization of Soviet society, family and domestic activities, and the sphere of social consciousness -- all these are directly or indirectly determined by the level of development of the economy, the material and technological base of society. This law acquires special importance during the transition to communism. It is not mere happenstance that the 24th Party Congress devoted primary attention to problems of the development of our economy.

"We value communism only when it is economically well founded," stated Lenin (Poln. Sobr. Soch. [Complete Works], Volume 38, page 179). The results of the Eighth Five-Year Plan for Development of the Soviet Economy and the targets specified by the 24th CPSU Congress for the Ninth Five-Year Plan are evidence of the fact that the party firmly follows this behest of Lenin. It was noted at the congress that the Directives of the 23rd CPSU Congress on the 1966-1970 Five-Year Plan for Development of the Economy were successfully met for the major economic and social indicators. The nation's economy grew at a faster rate than in 1961-1965. Industrial output volume rose 50 percent, while average annual agricultural output volume rose by 21 percent during the Eighth Five-Year Plan. National income in 1970 was 41 percent above the 1965 figure.

The Directives of the 24th CPSU Congress on the Ninth Five-Year Plan specify new and higher Soviet economic and cultural growth targets. In full conformity with the basic economic law of socialism, which expresses the objective dialectic, the unity of the goal of socialist production and means of achieving this goal, the congress declared: "The main task of the five-year plan consists in securing a substantial rise in the material and cultural living standards of our people on the basis of a high growth rate of socialist production, improved effectiveness and efficiency of socialist production, greater scientific and technological progress, and accelerated growth in labor productivity."

Defining the main task of the forthcoming five-year plan, the party is guided by the fact that a highly-developed socialist society has been built in this country and that the level of the economy, socialist societal relations, culture and consciousness of the broad masses has become immeasurably higher than in the past. Enormous economic might has been created in the USSR; almost 2 billion rubles worth of social product is produced each day (10 times as much as at the end of the thirties).

Proceeding from the achieved level of our economy, the growing needs of Soviet society and existing potential for expansion and improvement of production, the party specifies for 1971-1975 a rapid, planned and balanced development of all branches of the economy, and particularly its foundation -- industry. The Directives of the 24th CPSU Congress have formulated the basic task of industry in the new five-year plan, which consists in expanding and improving the industrial base for development of the socialist economy, particularly agriculture and related branches, in raising the technological level and efficiency of production, and in radical improvement of product quality. It is necessary to continue, the congress pointed out, "to develop at a rapid pace heavy industry -- the basis of expanded reproduction, technological reequipment of the economy and the defensive might of the Soviet state." The congress directives prescribe: further improvement in the structure of production, interbranch and intrabranch proportions, expansion of specialization and cooperative manufacture; acceleration in the rate of labor productivity growth; a rise in the technological level, economy and quality of all types of products more efficient utilization of productive capacity and fixed assets, raw materials, fuel, electric power and thermal energy.

The exceptionally important role of labor productivity was reemphasized at the 24th CPSU Congress. According to Marxist-Leninist science the law of increase in labor productivity, constituting one of the general economic laws, first assumes unconditional significance only under the conditions of socialism. Devoting enormous attention to increase in labor productivity, Lenin taught that it constitutes one of the "root tasks, for without this a final transition to communism is impossible" (Poln. Sobr. Soch., Volume 38, page 97). This thesis, advanced by Lenin in the draft Second Party Program, was developed in the study "Great Initiative": "Labor productivity in the final analysis is the most important, primary element for the victory of the new social system."

In this country that segment of the population employed in the social economy, as well as students of able-bodied age who are not concurrently gainfully employed, comprise 90 percent of the total active population. Consequently, such a source of production increase as growth in the volume of labor or number of gainfully employed has been practically exhausted. Under these conditions the main source for increasing production volume, and consequently a most important condition for creating the material and

technological base of communism and strengthening of the nation's economic and military might is increase in labor productivity. The Directives of the 24th CPSU Party Congress specify an increase in national income of 37-40 percent during the five-year period, whereby 80-85 percent of growth will be achieved by increasing labor productivity. From 87 to 90 percent of overall output growth in industry is to be achieved through this factor.

The economic strategy elaborated by the 24th CPSU Congress calls for all-out intensification of socialist production. This presupposes a broad development of scientific and technological progress, systematic renewal of the means of labor by technologically more sophisticated and economical modernization of existing equipment, radical improvement of organization of labor and production management, and further increase in the qualifications and cultural-technical level of the toilers. An immutable law of economic development is achievement of maximum results with minimum outlays, in the interests of society. The new five-year plan, in order to implement the demands of this law, calls for ensuring rapid development of the most efficient processes in all branches of industry. The plan calls for developing at an accelerated rate electric power engineering, particularly nuclear, machine building, chemicals, the petrochemical and gas industry, as well as the manufacture of instruments and computer hardware.

The Directives of the 24th CPSU Congress call for achieving major results in the manufacture of major types of industrial product. In 1975 it is planned to produce 1030-1070 billion kilowatt-hours of electric power, 122-127 million tons of cement, 480-500 million tons of oil, 300-320 billion cubic meters of natural gas, and 142-150 million tons of steel. In the final year of the five-year plan 2-2.1 million trucks and automobiles, 575,000 tractors, and 90 million tons of mineral fertilizers will be produced.

Of great importance for building the material and technological base of communism, in addition to industry, is comprehensive development of agriculture. The task, stated the 24th CPSU Congress, consists in increasing the average annual volume of agricultural output by 20-22 percent over the preceding five-year period, securing fuller satisfaction of growing demands of the population for food products and industry's demand for raw materials. We possess the requisite objective conditions for this -- vast available acreage, large-scale kolkhoz and sovkhoz production, and a high level of development of industry, science and technology. This country contains millions of experienced workers in agriculture and livestock raising.

How is such a substantial increase in agricultural production to be achieved? The congress specified that a decisive condition for meeting this target is an all-out strengthening of the material and technological base of agriculture, a consistent course aimed at agricultural

intensification by means of increasing use of chemicals, total mechanization of crop farming and stock raising, and extensive land improvement projects. It has been declared essential to ensure in every locality improvement in crop yield, greater specialization and intensification of production concentration, improvement in utilization of agricultural acreage, kolkhoz and sovkhoz equipment and manpower resources. Labor productivity on kolkhozes and sovkhozes will rise 37-40 percent during the five-year period. The 24th CPSU Congress specified concrete targets pertaining to delivery to agriculture of trucks, tractors, combines and other machinery, as well as mineral fertilizers.

The targets in the current five-year plan are based on the resolutions of the July (1970) Central Committee CPSU Plenum, which drafted a long-range agricultural development program. The party Central Committee specified the volume of capital investment in agriculture. In the period 1971-1975 the government and kolkhozes will spend approximately 129 billion rubles in capital outlays, that is as much as in the two preceding five-year plans combined.

The process of expanded socialist reproduction, which presupposes a high growth rate in the branches of material production, is impossible without a simultaneous corresponding development of all modern modes of transportation. Emphasizing this fact, and placing particular emphasis on the great importance of the railroads in this country, Lenin stated that "this is the key; this is one of the manifestations of the strongest link between city and village, between industry and agriculture, on which socialism is totally based" (Poln. Sobr. Soch., Volume 36, pp 271-272). Transportation is not only a continuation of the process of production but is also its essential general condition; the proportions in the development of industrial and agricultural production on the one hand and transportation on the other constitute some of the most important in the economy. It was noted at the congress that the performance of transportation is not meeting present needs and has become a bottleneck. In view of this fact, steps have been taken to intensify the comprehensive development of rail, maritime, river, pipeline, motor and air transport. Freight tonnage carried by all modes of transport will rise 32-35 percent during the five-year period. Public transportation services will be substantially improved. Communications, radio and television broadcasting will further develop on the basis of utilization of the most advanced technology.

Fulfillment of the extensive program for 1971-1975 will make it possible to increase capital spending in the economy by 36-40 percent. Accelerated return on capital investment, efficient and the most economically effective utilization are closely linked with consistent improvement in distribution of the Soviet Union's productive resources and development of the economies of all the union republics and the nation's economic regions. The congress directives call for accelerated exploitation of the natural resources and

growth in the economic potential of the eastern regions. In Siberia, for example, the plan calls for a high growth rate for energy-intensive ferrous and nonferrous metallurgical plants, chemicals, the timber industry, fuel industry, electric power engineering, and priority development for the construction industry. The nation's biggest petroleum industry base will be established in Western Siberia, producing as much as 120-125 million tons in 1975.

The 24th CPSU Congress examined questions connected with improving management and planning. The importance of these matters is determined by the unique qualitative nature of the present stage in the building of communism in the USSR. "The high level of economic development achieved by this country," emphasizes the Central Committee Report, "has an additional important consequence: there is a substantial increase in demands on planning, management, and business methods."

Management, which is a historical and political category, under the conditions of socialism radically alters its role and social purpose in comparison with an exploiter society. Management in the bourgeois society is effected by the capitalists for the sake of their own interests, and their management methods are of an antidemocratic, antipopular nature.

Management of society under socialism is a historically new type of management. Conditioned by the totality of economic and sociopolitical conditions of socialism, management serves the root interests and goals of the worker class and all toilers.

The present stage is characterized by the growing influence of the scientific and technological revolution on material production, on the nonproduction sphere, on the area of management and planning, on all aspects of societal affairs and the military. Science and technology are specific societal phenomena; inner laws of development are inherent in them. It is clear, however, that this development takes place in historically specified, concrete social conditions, which place on scientific and technological progress the imprint of the features of the given social system, class interests, the age, etc. The scientific and technological revolution, conditioned by the entire course of development of modern large-scale machine production, generates numerous consequences.

The 24th CPSU Congress highly praised the great contribution made by Soviet science toward solving current problems pertaining to the development of social production. Advances in the basic sciences have made it possible successfully to solve many scientific and technical problems in industry, agriculture and other branches of the economy. We are all familiar with the outstanding achievements of the Soviet space program, which has employed the magnificent achievements of the most advanced science and technology.

But history moves forward and imposes new, higher and more stringent demands on planning and encouragement of scientific and technological progress. The party orients scientists toward the all-out development of basic and applied scientific research and faster incorporation of research results in the economy. Under present-day conditions this is a most important factor in speeding up the pace of social production. It was emphasized at the congress that in an era when "the role of science is manifested to an increasing degree as a direct productive force, not individual scientific advances acquire the greater significance, no matter how brilliant these advances are, but rather a high scientific and technological level of all production."

Calculations indicate that every ruble invested in science, that is in basic or applied research and corresponding design and engineering projects generates 1.45 rubles in national income growth. The effectiveness of investment in science is thus four times as great as is the case with normal capital outlays. The Directives of the 24th CPSU Congress clearly specify the fundamental areas of emphasis in the forthcoming five-year plan for scientific research in the area of mathematics and cybernetics, physics, electronics, chemistry, geology, biology, medicine, etc. The plan also calls for further development of the social sciences and the conduct of comprehensive studies of contemporary processes of societal development for scientific management of the socialist economy and solution to the problems of building communism.

The Ninth Five-Year Plan, as all past five-year plans, is a plan not only for the economic but also for the entire social development of our country. The 24th CPSU Congress specified another substantial rise in living standards. This will be achieved on the basis of a steady growth of social production, rapid development of agriculture, expansion of the area of public services and manufacture of consumer goods. A considerable improvement in Soviet living standards during the forthcoming five-year plan will be secured from two basic sources: 1) increased individual wages based on quantity and quality of labor; 2) further growth in social consumption funds. Average wages of blue-collar and white-collar workers will rise 20-22 percent during the five-year period, while kolkhoz member wages for labor contributed to the communal farming operation will rise an average of 30-35 percent.

Social consumption funds, which are used in the USSR to pay pensions, social insurance benefits, student stipends, to finance free education and skill upgrading, medical care, housing maintenance, preschool facilities, etc, are becoming an increasingly important source for raising Soviet material and cultural living standards. According to a resolution of the 24th CPSU Congress, social consumption funds will grow by 40 percent and will total 90 billion rubles. Part of these funds are earmarked for

carrying out important new measures in the area of improving toiler living standards. New benefits include the following: cash payments in the form of child assistance will be paid to families in which per-member income does not exceed 50 rubles per month; the old-age pension minimum for blue-collar workers, white-collar workers and kolkhoz farmers will be increased; there will be improved pension benefits for disabled war veterans and families where there has occurred a loss of provider, if the provider was a blue-collar worker, white-collar worker or in the military; student stipends will be increased. A total of 22 billion rubles, as compared with 10 billion in the preceding five-year plan, has been allocated for measures to improve living standards through higher wages and increased benefits from social consumption funds.

Congress directives specify a large-scale housing construction program: a total of 565-575 million square meters of housing will be built during the five year period. The plan calls for substantially improving the quality of new housing, speeding up the construction of housing for blue-collar and white-collar workers in the eastern and northern regions, expanded construction of dormitories for students enrolled in higher educational institutions and secondary schools; there will be expanded cooperative housing construction, and substantial improvement in municipal services and facilities. Large-scale measures are planned to achieve further improvement and development of public education. There will be a pay increase for teachers. The state will finance and build general-curriculum schools for an added capacity of at least 6 million pupils. One target of this five-year plan is the training of approximately 9 million specialists with higher and secondary special education. Approximately one third of social consumption funds are spent in the USSR for needs connected with the upbringing and education of the younger generation. In recent years state budget expenditures per kindergarten child averaged 290 rubles per year, 130 rubles per pupil in the general-curriculum school, and 400-500 rubles per college student. Considerable funds are allocated for improving health services.

Improved prosperity for Soviet citizens is of great social significance. It is based on progress in material production. At the same time rising living standards and growing needs of the population serve as a powerful stimulus for further growth and improvement of production. The economy is not isolated from other areas of societal life. Comprising their base, it is closely linked to them and is in turn affected by social processes. The Ninth Five-Year Plan is the economic and social program for our development in the immediate future. A systems, comprehensive approach to the phenomena of societal affairs, their examination in a dialectical unity, within the framework of the integral social organism of our socialist society, is a characteristic feature of CPSU activities, which has been confirmed and developed in the proceedings of the 24th Congress.

Fulfillment of the Ninth Five-Year Plan adopted by the 24th CPSU Congress will enable us to take an important step forward in consistent implementation of the CPSU course aimed at overcoming presently-existing social differences between city and village, between mental and physical labor, in order to achieve further development of the Soviet socialist nations.

Karl Marx, the founder of scientific communism, stated that the entire economic history of the class antagonistic society is summarized in the movement of the opposition between city and village (K. Marks and F. Engel's: Soch. [Works], Volume 23, page 365). This opposition has reached its culmination under the conditions of imperialism. Doing away with private ownership of the means of production and transforming industry and agriculture on a new basis, socialism destroys the age-old difference and opposition between city and village. The socialist society also successfully overcomes the substantial differences between them. In resolution of this problem by the 24th CPSU Congress, the main emphasis was placed on a powerful upsurge in the productive resources of agriculture, intensification of crop farming and livestock raising. Growth in productive resources and their elevation to a new stage makes it possible more rapidly to develop and improve production relations in city and village, consistently to draw closer together the state and kolkhoz-cooperative forms of socialist ownership. The process of gradual transformation of agricultural labor to a variant of industrial labor is speeding up. The entire system of distribution relationships in the village is receiving further development, which is indicated in particular by the introduction of guaranteed wages on kolkhozes, a lowering of the pension retirement age for kolkhoz farmers, and extension of the blue-collar and white-collar worker pension scale to kolkhoz farmers.

In 1971-1975 the party plans to bring considerably closer together the earnings of kolkhoz farmers and the wages of corresponding sovkhoz worker categories, to raise the pay scale for farm machinery operators, to provide a faster increase in retail sales, to develop cultural and personal services at a rapid rate, to expand rural road construction, to increase rural housing with gas heating and cooking to 40-50 percent of total rural housing, to improve rural school facilities, and to speed up the effort to provide all rural localities with electricity and radio. Thus the resolutions of the 24th CPSU Congress in this area proceed from the great multiplicity of tasks connected with overcoming the social differences between city and village: differences in level of development of productive resources, production relations, living conditions, material welfare and culture.

Socialist public ownership of the means of production, which has been established across the board in the USSR, constitutes the economic foundation of the solid alliance between the worker class and the kolkhoz

peasantry. At the same time the alliance of these classes, the friendship among the peoples of the multinational Soviet Union, the solidarity of all toilers around the CPSU constitute the most important political foundation of the Soviet system. The worker class occupies by right a leading position in the social-class structure of our society. Comprising more than half of the toilers of the USSR and linked to state ownership of the means of production, which encompasses nine tenths of the nation's fixed productive assets, the worker class produces the greatest share of the social product and occupies the front ranks of the struggle for the creation of the material and technological base of communism. "The worker class," stresses the Central Committee Report to the 24th CPSU Congress, "was and remains the fundamental productive force of society. Its revolutionary nature, discipline, organization and collectivism define its leading position in the system of socialist social relations."

The intelligentsia is an organic component of Soviet society. Its place, its proportionate share in the population and social role under conditions of rapid scientific and technological progress are steadily growing. The congress directives call for large-scale measures to be taken in 1971-1975 to achieve further development of higher education, science, the press, television, radio, literature and art, as well as improvement in cultural facilities. The Ninth Five-Year Plan will constitute an important stage on the way to solving such a major social problem as the gradual elimination of the substantial differences between mental and physical labor.

Leninist principles of nationalities policy have found consistent development in the resolutions of the 24th Party Congress. Fulfillment of the program outlined at the congress will strengthen to an even greater degree the friendship among the peoples of the USSR and will assist on the one hand the flourishing of each socialist nation and ethnic group, and on the other hand will promote their further rapprochement, mutual influence and enrichment. Under the conditions of socialism these processes are inseparably interlinked and influence one another.

"During the years of building socialism in this country," we read in the Central Committee Report to the CPSU Congress, "a new historical community has arisen -- the Soviet people. New, harmonious relations between classes and social groups, nations and nationalities -- relations of friendship and cooperation -- have been born in joint labor, in the struggle for socialism, in battle for its defense."

In light of the resolutions of the 24th CPSU Congress, the development of nationalities relations in this country can be traced in a number of fundamental areas.

First of all, the economies of all union republics are rising to a new level, which ensures an increase in their role in the nation's overall production, an expansion of economic ties, closer and more comprehensive cooperation in accomplishing the general tasks of building communism.

In the second place, a new step has been taken toward equalizing the levels of economic development of the various union republics and separate regions within these republics. With a 42-46 percent growth in industrial output for the nation as a whole during the five-year plan, growth in the individual republics will be as follows: 53-56 percent in Belorussia, 46-49 in Lithuania and Uzbekistan, 57-60 in Kazakhstan, 56-59 in Moldavia, 60-63 in Armenia, and 55-58 percent in Turkmenistan. Within the RSFSR the productive resources of Siberia and the Far East will develop at an accelerated pace.

Thirdly, profound changes in the area of the economy, improvement in the political organization of Soviet society, and consistent solution to problems connected with overcoming social differences (between classes, between city and village, between toilers of mental and physical labor) will make it possible to achieve a higher level of social homogeneity of nations, which under the conditions of our multinational state constitutes one of the prerequisites for consolidation of communist societal relations. Simultaneously with this, economic development and increased population mobility are leading to a situation whereby the union and autonomous republics in the USSR are in fact becoming no longer one-nationality. For example, representatives of more than 100 nationalities and ethnic groups reside in Uzbekistan, while representatives of more than 120 live in the Ukraine. These processes will unquestionably continue during the new five-year plan.

Fourthly, ideological unity of the toilers of various nationalities will become greater, on the basis of further development of culture which is national in form and socialist in content, mutual enrichment with spiritual goods, and dissemination of general, common Soviet features of daily life.

An important place was occupied in the work of the 24th CPSU Congress by questions pertaining to communist indoctrination of toilers and intensification of the struggle against hostile bourgeois ideology. The forming of the new man constitutes one of the party's main tasks in building communism. It was pointed out at the congress that the heart of all party ideological and indoctrinational work is the forming of a communist world view in the broad toiler masses, their indoctrination in the ideas of Marxism-Leninism. Responsible tasks in the area of communist indoctrination of Soviet citizens are dictated by the increased scope and complexity of tasks pertaining to building communism, the necessity of establishing in

all members of society a correct attitude toward labor, observance of the principles of communist morality and total elimination of vestiges and carryovers from the past. The necessity of further improvement of communist indoctrination is also dictated by the present international situation and by the tasks of combating anticommunism, as well as ideological sabotage perpetrated by the imperialists, as well as opportunists and revisionists.

There is a root principle of Marxist sociology: social being determines social consciousness. The high degree of consciousness and moral fiber of our nation's toilers, their life-affirming Soviet patriotism and total dedication to the ideals of communism and socialist internationalism are formed under the determining influence of socialist reality, the Soviet way of life. This by no means signifies that matters pertaining to communist indoctrination can be settled spontaneously or haphazardly. An enormous role in the development of the new man is played by the subjective factor, by daily indoctrinational efforts by the Communist Party, the Soviet socialist state, Komsomol, the trade unions and other mass public organizations. The 24th CPSU Congress directed the party toward extensive utilization of the wealth of experience amassed in ideological effort, all means, forms and methods of communist indoctrination for training individuals who are worthy of their time and their historic mission, who combine within themselves spiritual wealth, moral purity and physical perfection.

The ideas of Marxism-Leninism are affirmed in a decisive struggle against bourgeois and petit-bourgeois ideology, philosophical and political indifference, and philistine, petit-bourgeois views. "We are living," it was emphasized at the congress, "under conditions of unabating ideological warfare being waged against our country and against the socialist world by imperialist propaganda, which utilizes the most sophisticated techniques and hardware." The imperialists are resorting to an open campaign against communism, to vicious distortions, deliberate falsification of our teachings and the essence of the socialist system. Simultaneously they are mounting across a broad front attacks on communism, camouflaged behind various speculative theories and doctrines, such as "convergence" and "deideologization." Particularly topical under these conditions is Lenin's demand: "We must tirelessly struggle against any and all bourgeois ideology, no matter in what stylish and brilliant garb it may be arrayed" (Poln. Sobr. Soch., Volume 6, page 269). At the 24th CPSU Congress the struggle against anticommunism and for purity of revolutionary theory was formulated as one of the root tasks of the party in the area of ideological effort.

An enormous role in accomplishing the diversified tasks involved in building communism is played by the Soviet national state, which was established as a result of the total and final victory of socialism in the USSR. The socialist national state, a successor to the dictatorship of the proletariat,

is continuing its cause, serving as the main instrument for building communism. At each concrete stage the socialist state is faced with particular tasks dictated by the specific features of the current situation and the needs of further development of society. In the present period our state is called upon to organize accomplishment of the extensive program in the economic and social areas as specified by the 24th CPSU Congress; to ensure protection of the rights and freedoms of Soviet citizens, socialist laws and order, and socialist property; to indoctrinate the masses in a spirit of conscious discipline and a communist attitude toward labor. The most important function of the Soviet popular state consists in reliably ensuring the defense and security of the nation, developing fraternal cooperation with the other socialist nations and defending the cause of universal peace.

The Central Committee Report to the 24th CPSU Congress stressed the following: "Carrying out the will of the people, the Communist Party tirelessly seeks to strengthen national defense. Problems of military organizational development constantly occupied the center of our attention during the period under review. Measures taken in recent years have made it possible substantially to strengthen the might and combat capability of the Armed Forces. Soviet citizens can be confident that our glorious Armed Forces are prepared at all times, day and night, to repulse an enemy attack, from whatever quarter it may come. Every potential aggressor is well aware that in case of an attempt at a nuclear missile attack on our country he will receive a devastating return strike."

The party has done substantial work toward further strengthening the Soviet state, improving the entire political organization of our society, and development of socialist democracy. The role of the soviets of toiler deputies, which total more than 2 million elected representatives, has grown; the performance of the edifice of government has improved. Public inspection agencies, trade unions, Komsomol, and labor collectives are extremely important within the system of Soviet democracy. The Central Committee and Soviet government have taken steps to strengthen legality, law and order in this country. The imperialists are engaged in extensive subversive activities aimed against the Soviet Union and the other socialist nations. Under these conditions an important role is played by state security agencies, which have been fortified with politically mature cadres.

The 24th CPSU Congress focused considerable attention on problems of our party's development and further increase in its leadership role in society. The Central Committee Report states: "The main element in Communist Party activities is elaboration of a general plan for the development of society, a correct political line and organization of the toilers in order to achieve practical implementation of this plan." Our party, which has a

membership of approximately 14 and a half million, is consolidated as a monolith, by a unity of will and organization, and honorably carries out the role of political guide and director of the worker class and all toilers, and is confidently leading the Soviet people along the path of Lenin. The party lives and acts on the basis of time-tested Leninist principles. The party Central Committee unswervingly pursues a course aimed at development of intraparty democracy, observance of established party standards, as well as increased activity and ideological-theoretical training of Communist Party members. An important place in the activities of the Central Committee, republic, kray, oblast, city and rural party committees is occupied by matters pertaining to strengthening party organizations, selection and indoctrination of cadres. Emphasizing that a mandatory condition for succession of the party's political line and its revolutionary traditions is a solicitous attitude toward veteran cadres and the advancement of young, promising individuals, the congress pointed in particular to the necessity of increasing demands on cadres, their responsibility to the party and state. "An increase in the discipline and responsibility of cadres," stated L. I. Brezhnev at the congress, "is one of our most important tasks."

The 24th Congress gave a profound, comprehensive Marxist analysis of the current international situation and the fundamental trends in its development. This made it possible to draw important conclusions pertaining to the foreign policy of the Soviet Union, tasks of party and state in strengthening the defensive capability of our country and the entire community of socialist nations. Our party, as the entire communist movement, proceeds from the standpoint that the current period is characterized by an aggravation of the historical struggle between the forces of progress and reaction, socialism and imperialism, whereby the entire world is the arena of this struggle.

The fundamental conflict of our time is the conflict between the two world systems: socialism and capitalism. The Soviet Union and the other socialist nations, the communist movement and progressive people throughout the world are in favor of the conflicts between the two opposing systems being resolved peacefully, without war. Peaceful coexistence has become one of the root questions of the present day, an essential and realistically possible alternative to a devastating world war.

A fundamental thesis found new confirmation in the proceedings of the 24th CPSU Congress: peaceful coexistence between states with a different social system is in the policy of the socialist nations not a tactical line but rather a strategic course to be followed during the entire period of transition from capitalism to socialism. An extensive program of struggle for peace and international cooperation, for freedom and independence of peoples was advanced at the congress. The Soviet Union places in contrast

to the aggressive policy of imperialism a policy of active defense of peace and strengthening of international security. The struggle of the socialist nations for the preservation and strengthening of peace is encountering savage resistance on the part of aggressive, militarist forces, headed by U.S. imperialism. It is of an extraordinarily persistent character and involves decisive counteraction to reactionary intrigues in various parts of the world. The course taken by the socialist nations toward peaceful coexistence between nations with different social systems is affirmed in the struggle against imperialism, consequently possessing a profoundly class content.

"Firm resistance to aggression," states the resolution of the 24th CPSU Congress on the Central Committee Report, "has been inalterably combined in Soviet policy with a constructive line aimed at resolving current international problems, with consistent insistence on the Leninist principle of peaceful coexistence of nations with different social systems. The congress instructs the Central Committee CPSU to continue in the future pursuing a policy of vigorous opposition to the imperialist policy of war and aggression, as well as exposure and stopping of schemes hostile to the cause of peace and freedom."

The CPSU always proceeds on the basis of Lenin's instructions pertaining to the necessity of a sober, objective consideration of the balance of power and the capabilities of struggling classes and states. "Seriously to consider national defense means to prepare thoroughly and to take into strict account the balance of power," stated V. I. Lenin (Poln. Sobr. Soch., Volume 36, page 292). Vladimir Il'ich stated that in matters of war and peace the bourgeoisie is split into two segments: the "aggressive-bourgeois" and "pacifist" camp of the international bourgeoisie (Poln. Sobr. Soch., Volume 44, page 408). Both these bourgeois factions remain our class enemies, but an attempt on the part of the less militant, moderate wing of the bourgeoisie realistically to assess the world balance of power and to seek on this basis mutually acceptable solutions to international problems cannot but be welcomed by us. The Soviet Union has established mutually beneficial trade relations with a number of capitalist countries, whose leaders show an interest in international cooperation.

The foreign policy of imperialism during the last 5 years has given new evidence of its unchanging reactionary, aggressive nature. The growth of militarism in imperialist nations has reached an unprecedented scale. In 1949, when the aggressive NATO bloc was formed, the military expenditures of its member nations totaled 18.7 billion dollars, while the total reached 103 billion in 1970. Colossal funds taken from the pocket of the taxpayer are being diverted away from solving serious social problems and are being spent for war preparations. The amount of money spent in a single month by NATO nations for arms would be sufficient to irrigate the entire Sahara Desert.

Documents of the CPSU and international conferences of Communist and worker parties have stated that American imperialism, which has assumed the function of world exploiter and genderme, is the main bulwark of international reaction. The United States is the implacable foe of socialism, democracy, and all liberation movements. It was noted at the preceding, 23rd Party Congress that U.S. military expenditures in the two postwar decades exceeded U.S. military expenditures for the two decades prior to World War II by 48 times. In the last 5 years the United States has spent approximately 400 billion dollars on the military. Eight and one half million persons are working directly for the needs of the Pentagon, that is one out of every nine U.S. wage-earners. Military contracts involve 21 percent of all skilled workers and 16 percent of all technicians; more than 100,000 companies are Pentagon subcontractors. Science in the United States is 62 percent militarized, while military expenditures exceed by ninefold appropriations for social security, health, education, welfare and housing.

After World War II the United States established a system of military alliances which is unprecedented in history. This system encompasses 44 nations. In the NATO countries more than 6 million men have been placed under arms, troops which are armed with the most modern weapons and diversified combat equipment. Overall growth in military expenditures in the capitalist nations over the last several years has averaged 5-6 percent annually.

In addition to quantitative characteristics it is important to take into consideration extremely substantial new qualitative elements of the arms race which is going on in the imperialist countries, elements connected with advancement to the foreground of the most up-to-date and promising strategic weapons systems. In the United States such systems include development of multiple warheads for MIRV system strategic missiles, extensive adoption of mobile strategic launch facilities, development of the Safeguard ABM system, etc. The extensive strategic arms program adopted by the United States at the beginning of the sixties is devouring increasingly larger appropriations. In 1970/71 half of all appropriations for strategic forces are being spent for the development of new and modernization of existing weapons systems. In the strategic forces proper the main emphasis is placed on offensive weapons. According to foreign statistics, the Pentagon possesses 1054 ICBMs, 41 missile-carrying nuclear submarines, 500 strategic bombers, and 25,000 fixed-wing and rotary-wing aircraft.

The 24th CPSU Congress branded the continuing U.S. aggression against the peoples of Vietnam, Cambodia, and Laos as the greatest crime of contemporary colonialists and America's disgrace. Grossly violating the 1954 and 1962 Geneva Agreements by unleashing a war in Indochina, the United States has dropped on these three countries more than 10 million tons of

explosives, and has employed napalm and chemical weapons. Waging a war of annihilation, the United States has transformed Indochina into a proving ground for the testing of the latest-model weapons and combat equipment and the testing of organizational, tactical and operational principles and formation structures of ground forces, airborne troops and air power. The peoples of Indochina have been chosen by the American aggressors as a test subject to check the effectiveness of the doctrine of "flexible response," and recently to verify Nixon's notorious "Guam Doctrine" with its misanthropic emphasis on "war by Asians against Asians."

The war in Vietnam, the escalation of military operations in Cambodia, the invasion of Laos by Saigon and American troops, as well as continuing acts of U.S. provocation against the Democratic Republic of Vietnam have greatly aggravated the situation in Indochina and have deteriorated the overall world situation. The situation in the Near East, where the Israeli extremists, with the support of the imperialists of the United States and other Western nations, are continuing their occupation of captured lands and are hatching new aggressive plans directed against the UAR and other Arab nations, remains a serious threat to peace. The empire pretensions of British imperialism have become intensified with the coming to power of the Conservatives; the British "East of Suez" strategy has become more active; ties have strengthened with the racist regimes in South Africa and Southern Rhodesia. Revenge-seeking passions have not died out in West Germany, and neo-Nazism has become a dangerous force. In Japan militarization of the economy is progressing at a stepped-up pace, and the reactionary military clique, the Gunbatsu, are throwing aside all restraint. The draft Fourth "Defense Program" (1972-1976) calls for spending 5800 billion yen on the military, considerably more than has been spent over the last 20 years. Territorial claims on the Soviet Union have begun to be openly expressed in this country. Japanese Prime Minister Sato addressed the most recent session of the U.N. General Assembly with revanchist declarations pertaining to the "northern territories." Bloodshed is continuing in Africa where, with NATO assistance, the long war is continuing between the Portuguese colonialists and the freedom-loving peoples of Angola, Mozambique, and Portuguese Guinea (Bissau).

Revealing the complexity and conflictive nature of the international situation as well as intensification of aggression and war by imperialist forces, the 24th CPSU Congress pointed to the necessity of further strengthening the economic and military might of the USSR and the Warsaw Pact member nations. The party is guided by the Leninist thesis that defense of revolutionary conquests constitutes one of the general laws applying to the building of the new society.

To V. I. Lenin goes the historical credit for creation of an integral doctrine on defense of the socialist homeland. Lenin's ideas on the defense of socialism and its conquests received further development in

CPSU documents and resolutions, in the Party Program, in the materials of the 23rd CPSU Congress, in the documents dedicated to the 50th anniversary of the Great October Socialist Revolution and the Lenin Birth Centennial. "At all stages of development of the socialist state defense of the conquests of socialism against encroachments by the forces of counterrevolution and world imperialism has been and remains its vital cause," state the Central Committee Theses on the Lenin Birth Centennial.

The 24th CPSU Congress was guided in its resolutions by the fact that today the objective conditions predetermining the necessity of strengthening the defensive capability of the USSR and the other socialist nations have remained fully preserved. In the postwar period, characterized by the establishment and rapid growth of world socialism, collapse of the colonial system and a general upsurge of the entire revolutionary-liberation movement, imperialism has become even more aggressive and adventuristic, capable of the most rash and foolhardy actions.

Big monopoly combines and conglomerates dominate the economies of the leading imperialist nations, dictating a reactionary course in the domestic policies of the bourgeoisie and an aggressive, expansionist course in foreign policy. The patterns of development of the military-industrial complex and state monopoly capitalism as a whole form the basis of the political line of the ruling circles of the imperialist powers, a line which can be traced in the various volitional, subjective acts of bourgeois governments, premiers and presidents. The coming to power of representatives of the most reactionary wing of the bourgeoisie, infected with insane ideas about "destroying communism," is capable of accelerating the effect of the objective patterns of development of monopoly capitalism, pushing the world to the brink of war and unleashing it. Unable to "replay" the historical destinies of peoples, imperialism is nevertheless capable of inflicting upon mankind unprecedented suffering, destruction and death.

The resolutions of the 24th CPSU Congress, which call for further growth of our nation's economic might, are assuming enormous international significance. The Congress Directives on the new five-year plan state that Soviet economic growth "will serve the cause of further strengthening of the forces of the world socialist community and will again demonstrate the advantages of the planned socialist economic system. By meeting the targets of the five-year plan, the Soviet people will make a worthy contribution to consolidation of all forces fighting for peace, democracy and socialism."

An invaluable role will be played by successful fulfillment of the Ninth Five-Year Plan in strengthening the defensive capability of the USSR and the brother nations. Lenin's statement that "the connection between the

nation's military organization and its entire economic and cultural system has never been as close as it is at present" (Poln. Sobr. Soch., Volume 9, page 156) today becomes particularly meaningful. Armed forces under present-day conditions need large quantities of diversified types of industrial and agricultural products; their functioning, development and improvement are inconceivable without the most advanced means of transportation and communications. The present stage of development of the military is imposing on the economy increasingly growing demands of a qualitative type. In war, stressed Lenin, "victory goes to he who has the greatest techniques, organization, discipline and the best hardware" (Poln. Sobr. Soch., Volume 36, page 116). Of great importance in this respect are the resolutions of the 24th CPSU Congress in the area of technological progress, improvement in labor productivity, organization and effectiveness of all social production. National income, a certain portion of which can be used to strengthen the military might of the state, characterized by an aggregate of quantitative and qualitative armed forces development indices and military affairs as a whole, increases more rapidly with a growth in intensification of production.

The economy directly and indirectly influences: the material and technological base upon which rests armed forces development, capability for improving their organizational structure, general scientific and occupational-technical training of the population and military personnel, particularly officers; the general level and scale of practical military adoption of scientific advances; content of the major theses of the state's military doctrine; development of all "levels" of the art of warfare -- tactics, operational art and strategy, the forms and methods of conducting combat operations and a war as a whole.

"It is impossible to make a country defense-capable," stated Lenin, "without the greatest heroism on the part of a people which is carrying out great economic reforms in a bold and resolute manner" (Poln. Sobr. Soch., Volume 34, page 197). Leninism includes among the latter not only major changes in the material-technological area but first and foremost in the area of economic, production relations, which influence the political structure of society.

As is well known, war is rooted within the economic system of the exploiter society, but its essence is manifested directly in the area of politics. Armies act as an instrument of policy, the weapon of a given state. The socialist social and political system does not engender war, but in wars forced upon it by imperialism it ensures an unprecedented spirit on the part of the people and its armed defenders, and their willingness to endure self-sacrifice for the sake of achieving total victory over the enemy. The role of "human material," along with the political, moral, and psychological

factors has become exceptionally important in modern war with its extremely high degree of stress, destructive character, resoluteness of aims, dynamic nature, and involvement of great masses of people and machines. The essence of man, as stated by Karl Marx, "is not something abstract, inherent in an individual. In actuality it is the totality of all societal relations" (Marks and Engel's: Soch., Volume 3, page 3). The individual is the product and carrier of societal relations. Consequently the social environment exerts decisive influence on the conduct of men, on their actual role in history, including in war. The army is a copy of society, which nourishes it not only materially but spiritually as well. All those socioeconomic and ideological-political processes which occur in society find expression in the army.

L. I. Brezhnev stated in the Central Committee Report to the 24th CPSU Congress: "The Soviet Army is a part of our people, living a common life. In this country military service is not only a school of combat skills. It is at the same time a fine school of ideological and physical conditioning, discipline and organization." Congress resolutions directed toward the further development and improvement of societal relations in this country have a direct bearing as well on military organizational development, the training of Soviet citizens, particularly youth, to defend the homeland and the national interest of the USSR. Of prime significance for strengthening the Soviet Armed Forces, for their unity with the people are further consolidation of the alliance between the worker class and the kolkhoz peasantry, the friendship of the peoples of the USSR, the overcoming of substantial differences between city and village, mental and physical labor, and a rise in the material and cultural living standards of Soviet citizens.

In imperialist countries some political and military leaders are inclined to underrate the role of man in war. The real state of affairs here from a class standpoint involves fear of mass armies, the arming of millions of individuals whom the ruling imperialist circles force to wage war for interests alien to peoples. From a gnoseologic standpoint the failure to appreciate man's significance in modern war is due to the metaphysical opposition between man and machine, a fetishization of the latter, absolutization of rapid advances in military technology. In actual fact history shows that the importance both of machinery and man is steadily increasing. Modern war "needs high-quality human material just as badly as it needs modern machinery," noted Lenin (Poln. Sobr. Soch., Volume 9, page 155).

The realities of life have forced even the most violent opponents of technological progress to face the role of technology in war. But nothing can alter the immutable fact that it is not material elements, soulless implements of war alone which are fighting, but rather men, wielding

weapons and equipment. As M. V. Frunze commented, "it is dangerous to underrate the role of technology, but one should not be hypnotized by it" (Izbrannyye proizvedeniya [Selected Writings], Volume 2, Voyenizdat, 1957, page 347).

Under present-day conditions the military policy of the party and Soviet state as well as the practical activities of military cadres proceed from realization of the fact that the correlation between man and machine, their dialectical unity and interrelationship have assumed particular significance in the first place in connection with profound, radical changes in military affairs, in the character of modern war and the methods of its conduct; secondly, as a consequence of an extraordinary aggravation of the ideological struggle in the world arena, an increase in the role of the morale-political and psychological factors in war; thirdly, in view of the necessity of accomplishing the complex tasks of military organizational development, maintaining a state of continuous combat readiness and a high degree of fighting efficiency of large units, units, and subunits; fourthly, in connection with the increased importance in the army of a high degree of organization, discipline and self-discipline.

In the industrial age the development of science, scientific and technological progress, has always been extremely important for military affairs. Today the close relationship between military affairs and the state of science, particularly the natural and applied sciences, has acquired the force of an immutable law, which nobody can ignore. A country's overall scientific potential, influenced by the degree of development and qualitative uniqueness of the social, natural and applied sciences, has become one of the most important factors and criteria of political, economic and military might.

One characteristic feature of the present-day scientific and technological revolution is a sharp reduction in the time gap between discovery (invention) and practical application, which is leading to "explosive" advances in technology. This can be traced particularly clearly in the area of military affairs, where cycles in the development of many types of weapons extend over several years. The latest advances of modern science are utilized in the army. Albert Einstein called the liberated force of the atomic nucleus "the most revolutionary development since prehistoric man discovered fire." This force, embodied in nuclear missile weapons, in combination with electronic computer hardware, has engendered radical changes in the area of strategy, operational art and tactics, fundamental paths of further development of the art of warfare, armed forces branches and arms.

In his address at the congress A. N. Kosygin, Chairman of the Council of Ministers USSR, stated that "many new types of modern weapons have been

developed and are being manufactured in this country on the basis of the latest scientific and technological advances, and weapons performance characteristics have been improved." Kosygin went on to state: "We can inform the congress that the Soviet Armed Forces are armed with the most advanced, top-grade combat equipment."

Scientific and technological progress is becoming a bridgehead on which a fierce struggle is taking place between socialism and capitalism on a worldwide scale. In the area of military affairs this finds expression in the struggle to achieve military technological superiority, for faster and most effective utilization of the latest discoveries in the basic sciences, inventions and technological improvements for increasing armed forces firepower, development of the most modern models of weapons, combat equipment, transport vehicles, electronic equipment, and means of automated troop control at the various echelons. All this imposes new and high demands on armed forces personnel, particularly officers. Declarations made at the 24th CPSU Congress on the necessity of further raising the level of skills, discipline, ideological-political maturity and responsibility of cadres for the assigned task apply both directly and indirectly to the Soviet Armed Forces.

Great is the significance of Soviet military science in solving current problems stated by the course of development of the international situation and military affairs proper: in investigating the objective laws of modern warfare, its quantitative and qualitative parameters; in a thorough study of the correlation of objective conditions and the conscious element in the activities of military cadres; in elaboration of root problems of theory and practice of the art of warfare, the ways, means and methods of achieving further improvement in the organizational structure, optimal and harmonious development of the armed forces branches; in maximum expedient and efficient utilization of present and future weapons and combat equipment; in the search for ways to reduce the time required to make troops fully combat ready; in further improvement in cadre work style and scientific organization of military labor. Military science has the task, deeply synthesizing practical experience and know-how, of providing well-founded and specific recommendations in the area of troop control with the employment of electronic computers, elaborating initial principles for simulation and mathematization of the phenomena of warfare and optimization in the area of military organizational development. Of great national importance is correct, economical, maximum efficient utilization of defense appropriations.

The development of sociopolitical relations in the USSR under conditions of stepped-up building of communism has led to a substantial broadening of the social base of the Soviet Armed Forces, their transformation into an agency of the national, popular socialist state. The systematic growth of

the worker class and its increased share in the overall population has a beneficial effect on the social composition of army and navy. The worker class is the most conscious, progressive and organized social group, and an increase in the number of representatives of the worker class in the ranks of the Armed Forces strengthens morale, organization and order in the troops, and increases their combat capability. An increasing number of technically-trained young people, the great majority of whom have had 8 to 10 years of education, who possess secondary special and higher education are entering the army and navy. This country's adoption of universal secondary education for young people and the resolutions of the 24th CPSU Congress pertaining to higher, secondary education and occupational-technical training will provide the country's economy and its Armed Forces with young replacements who meet today's demands.

The total and final victory of socialism in the USSR and the transition to the building of communism in this country, the moral-political and ideological unity of Soviet society, and the close and solid unity of toilers around the Communist Party and its Leninist Central Committee determine the invincible might of the Soviet Armed Forces -- the flesh and blood of the people.

Under the conditions of building communism there is in operation an objective law of unswerving growth in the leadership role of the Communist Party in the affairs of Soviet society. The CPSU exercises exclusive direction of the activities of all public and governmental organizations, including the Soviet Armed Forces. This state of affairs is formalized in the CPSU Program, where we read: "Communist Party guidance of the Armed Forces and a strengthening of the role and influence of party organizations in the army and navy constitutes the foundation of military organizational development."

The 24th CPSU Congress stated that an increase in the role of the party is dictated by the entire course of development of Soviet society and the present international situation. In the area of military organizational development increase in the guiding role of the CPSU is dictated: by the necessity of a profound, consistently class, party analysis of the world political and military-strategic situation; by increasing complexity of the tasks of total securement of invincible Soviet defensive capability with material resources, as well as from the standpoint of development of all social and scientific-technological conditions and prerequisites; by the requirements of internal development of that most complex organism, today's Armed Forces; by the need for further development of creative activity on the part of the fighting men of the army and navy, and intensification of their Communist indoctrination; expansion of the international functions of the Soviet Armed Forces, whose task is reliably to ensure the security of our nation, to defend together with the armies of the brother socialist nations the entire community of socialist states, to

serve as a powerful base of support in the struggle of peoples against imperialism, for national and social liberation, to constitute a firm bulwark of security of peoples and world peace.

Everything which has been created by the people, it was emphasized at the 24th CPSU Congress, must be reliably protected. To strengthen the Soviet state means to strengthen its Armed Forces as well, to enhance the defense capability of our homeland in every way possible. The Soviet people is accomplishing all its economic, social and defense tasks, developing and strengthening close relations with the nations of the socialist community. In the Resolution of the 24th CPSU Congress on the Central Committee Report we read: "The military organization of the Warsaw Pact member nations has become stronger as a result of collective measures. The armed forces of the allied nations are in a high state of preparedness and constitute a reliable guarantee of the peaceful labors of the brother peoples."

The 24th CPSU Congress persuasively demonstrated that the Party of Lenin is confidently leading our people along the path of building a communist society. Carrying out their historical mission, their patriotic and international duty, the Soviet Armed Forces keep a vigilant watch on the intrigues of the enemies of peace and stand firmly on guard over socialism and communism, and the revolutionary conquests of peoples.

# THE LENINIST STYLE FOR MANAGEMENT OF A WAR ECONOMY

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The documents of the 24th CPSU Congress which embody the scientifically based theses concerning the present-day economic strategy of our party have devoted great attention to questions of improving the forms and methods of economic leadership. Further improvement in national economic planning and management is aimed primarily at insuring an all-round intensification of social production and raising its efficiency, which are the main line in the economic development of our country both for the immediate years as well as over the long run and are a most important condition for creating the material and technical basis for communism and for strengthening the defense capability of the Soviet state.

The Communist Party, in creatively developing ways for raising the level of all economic management work considering the new requirements of the present stage of communist construction, unfailingly turns to the rich ideological and theoretical heritage of V. I. Lenin, and consistently implements the Leninist style for managing the economy and the entire nation.

The creator of the CPSU and the founder of the world's first socialist state, V. I. Lenin, even at the dawn of the founding of the new order in our nation, asserted that the working people united by the soviets can and should manage all the affairs of state. V. I. Lenin repeatedly pointed out the newness and complexity of creating a system for running the Soviet republic. While in the past, he pointed out, the bourgeoisie, in coming to power, received "an already tested crew, a previously prepared road, and previously tried mechanisms," the working class which has won power in our country had "neither a crew, nor a road, nothing at all, and certainly nothing which had been tested out before!" (Complete Collected Works, Vol 44, p 416).

Under the difficult conditions of the Revolution, the Civil War and post-war chaos, V. I. Lenin and the party led by him showed a creative approach to working out and introducing forms, methods and principles of socialist organization for managing the nation and its economy. Vladimir Il'ich provided a scientific solution to the fundamental problems of planning and managing a socialist economy.

For more than 50 years our party, guided by Marxism-Leninism and relying on the revolutionary creativity of the masses, has created a system of scientific social management, and has accumulated great experience in

economic leadership under conditions of both peace and war. This experience is based upon the Leninist requirements for managing a planned economy -- scientificness, reliance on the objective laws of warfare, the ability to correctly determine the prospects and sequence of the tasks to be carried out (to find the main link in the entire chain), an orientation based on the newest scientific and technical achievements and advanced experience, flexibility, and the ability to respond quickly and efficiently to changing conditions. The documents of the 24th CPSU Congress are new and vivid evidence of the truly Leninist approach by our party to elaborating a broad program of economic construction and ways for improving the system of economic management in the USSR.

Both in peacetime and in wartime the Communist Party, concentrating attention on the question of further improving management of the national economy and planning, concerns itself about improving the work of the entire state apparatus. Our party proceeds from the view that without a state apparatus that is coordinated and operates efficiently on all levels it is not possible to manage the complex organism of a modern economy and other aspects of social life, particularly the matter of national defense. For this reason, the 24th CPSU Congress stressed, an important task is to raise the efficiency, coordination and effectiveness of the state apparatus and all management bodies.

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Relying on the genial works of V. I. Lenin, in the area of economic management the CPSU carefully considers the concrete situation in which our nation is developing. During war, when the national economy, in the apt expression of V. I. Lenin, "is totally absorbed by the conditions of wartime," our nation becomes a united military camp. Since in the process the socioeconomic system and the laws of its development are maintained, the forms and methods of economic management which depend upon them also remain as before. However, the forms for the manifestation of economic laws change under the effect of specific wartime conditions.

With the transition of the national economy to a wartime footing, naturally, the problem arises of adapting the economic management system to the needs of wartime. Basically, the management task consists in bringing the practical work in all spheres of state activity into conformity with the new conditions of society's economic life and with the new forms for the manifestation of the economic mechanisms which are determined by the state of war and the necessity of organizing victory over the enemy. This, of course, is a complex and responsible matter, and it requires very close attention as well as preliminary preparations carried out in peacetime. The multifaceted theoretical and practical activities of V. I. Lenin also show the way in this area of the functioning of the Soviet state.

The experience of the wars in defense of the socialist homeland as generalized in the works of V. I. Lenin and the party documents shows that the war economy, as a particular state of the national economy under the conditions of a war, is characterized by unique economic mechanisms in the area of production and distribution. This uniqueness is expressed above all in the necessity of converting all the production capacity of the state to the primary satisfaction of the war's requirements, in the fundamental reorganization of the national economic structure, and in adapting the national economic rates to the requirements of the extraordinarily intensifying military demand caused by the condition of waging war.

However, the growth of military production and the uniqueness of the distribution of the national economic product, just as the particular features of the forms of economic management, do not alter the social basis of the economy and do not upset the economic organization of society.

Under wartime conditions, as was the case during the years of the Great Patriotic War, the economic management system which was previously created and was inherent to the socialist structure was basically preserved. The changes which it underwent under the wartime situation were reduced chiefly to a reorganization of all national economic management on a wartime footing, to changing the production, distribution, and stockpiling plans, and to the work of the management bodies on a war basis.

What should the wartime reorganization of the management apparatus entail? The experience of the Civil War has already given an answer to this. In the letter of the party Central Committee, which urged all the workers to fight against Denikin, the basic principles and ways for the war reorganization of all the institutions of the Soviet republic were formulated with maximum clarity. In cautioning against the danger of distorting collective leadership, of organizational futility and hare-brained plans, V. I. Lenin stressed the importance of establishing the personal responsibility of each worker for a precisely defined job. "...All the work of helping the war," he pointed out, "should be carried out completely and exclusively through the already existing military institutions, and by improving, strengthening, expanding and supporting them" (Complete Collected Works, Vol 39, p 46). V. I. Lenin permitted the creation of special "defense committees," but only at the discretion of the higher bodies of Soviet power.

During the years of the Civil War the fundamental questions of developing the wartime economy, mobilizing all the forces of the country and developing its armed forces were resolved by the party Central Committee and by its congresses and conferences. At the same time at the end of 1918, under the initiative of V. I. Lenin, a new higher body, the Defense Council of Workers and Peasants (Defense Council) was established for repelling the

military attack by the hordes of foreign interventionists and White Guards. This council was given full authority to mobilize the forces and resources of the nation in the interests of defense.

From the very outset of its activities, which were directed and led by V. I. Lenin, the Defense Council was concerned predominantly with matters of military-economic mobilization, and with the creation, stockpiling, and centralized distribution of material resources for the defense of the country. "...We have not had a single session of the Council of People's Commissars or the Defense Council," commented V. I. Lenin, "where we did not allocate the last millions of poods [pood = 36 lbs] of coal or oil..." (Complete Collected Works, Vol 38, p 357). Overall for the 1918-1920 period the Defense Council held 170 sessions at which more than 4,000 questions of state importance were examined.

The diverse activities of the Defense Council were marked by effectiveness and efficiency, profoundness in the discussion of questions, clarity of decisions, and strict control over their precise execution. Control over execution, according to V. I. Lenin, is an obligatory condition for effective leadership in any area, particularly during wartime. This was the first example in history of the successful realization of the principle of centralization and the unity of party and soviet, economic and military leadership of a country under the conditions of civil war. Its experience played a major role in organizing the management of the war economy and the entire life of our country during the period of the Great Patriotic War.

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The treacherous attack by fascist Germany on the Soviet Union sharply altered the situation and necessitated the rapid and decisive reorganization of all the work of our country on a wartime footing. "At present," stressed a directive of the USSR Council of People's Commissars' (CPC) and the Central Committee of the All-Union Communist Party (of Bolsheviks) of 29 June 1941, "everything depends upon our ability to organize and act rapidly, without losing a single minute of time, and without overlooking any opportunity in the struggle against the enemy."

From the very outset and to the end of the war the Soviet war economy was developed on the basis of state military-economic plans, which reflected the general tasks and specific directives of the Communist Party and the Soviet Government in the area of mobilizing all the forces and resources of the country to defeat the enemy. The party and the government energetically carried out a series of measures which made it possible quickly to transform the country into a unified military camp and to subordinate all its life to the interests of the front and the tasks of organizing the defeat of the enemy.

The reorganization also involved the management apparatus of the Soviet state. Based on the experience of the Civil War an extraordinary administrative body was created which brought together into its hands the functions of higher party and state leadership. This was the State Defense Committee (SDC) which was organized on 30 June 1941 according to a decree of the Presidium of the USSR Supreme Soviet, the Central Committee of the All-Union C.P. (of Bolsheviks), and the USSR CPC. I. V. Stalin was appointed the chairman of the SDC.

All power in the state and all the controls for running the wartime economy were concentrated in the hands of the SDC. The USSR State Planning Committee (Gosplan), the ministries and departments, and all the economic organizations of the country operated under the leadership of the SDC. The SDC provided direct leadership for the production of the major weapons of the Soviet Army -- tanks, aircraft, ammunition and supplies, as well as supervision of rail transport.

In its activities the SDC relied on a system of reorganized party, state, and military organizations. In particular instances the SDC created special committees (municipal defense committees) and councils (evacuation councils). There was also the practice of temporarily assigning SDC representatives with great authority to outlying areas. This insured supervision over the implementation of the decisions approved by the SDC and their effective execution on the major sectors of the front and rear.

During the entire Patriotic War the SDC effectively resolved major problems of the armed struggle and its economic support. Many of the problems were worked out at joint sessions of the CC Politburo and the SDC, and were then transmitted to the executors as decisions of the SDC. For these, predominantly military economic problems, during the war years the SDC issued up to 10,000 decisions and instructions.[1] The SDC decisions, as a rule, were quickly carried out and this helped enormously to mobilize all the national forces and to use them successfully in the war against the German invaders.

The SDC insured close links and interaction of the actual military organizations which were in charge of deliveries to the front with the organizations managing the wartime economy, and above all with the USSR State Planning Committee. The production and distribution of all the products needed by the army and the war economy were planned by Gosplan. The latter was a dependable instrument of the government and the SDC for organizing the war economy.

The General Staff, the "brains of the army," was also an irreplaceable assistant to the Supreme High Command and the SDC for planning the operations and insuring their comprehensive support. The General Staff had a

special administration which was in charge of organizing the rear services and materiel support for the armed combat. "Here," wrote Army Gen S. M. Shtemenko in his memoirs, "above all were studied and resolved the problems of supplying the front with weapons and equipment, were considered the resources of the nation which could be mobilized for the needs of the war, and were concentrated all the data on the production of the defense industry."

In the area of material and technical support for planned strategic operations, proceeding from the capabilities of the economy over the forthcoming period and the role of each operational formation and its assigned missions, the General Staff worked out a plan for supplying the fronts with combat, transport and other equipment as well as with ammunition and fuel. For this purpose close daily contact and coordination were needed between the General Staff and the higher planning and national economic organs as well as direct constant contact with the Main Administration for Rear Services of the Red Army, the Main Artillery Administration, and with other special administrations of the People's Commissariat of Defense. These administrative bodies, in turn, were in contact with the corresponding administrations of the national economy. Thus, the plans for the production and distribution of weapons and ammunition were worked out by the staff of the Main Artillery Administration together with representatives of the people's commissariats of the defense industry and officials of USSR Gosplan. The weapons and ammunition manufactured by industry were accepted by the acceptance staff of the Main Artillery Administration and were sent to the formations of the Armed Forces in accord with the approved allocation plans.

The plans for allocating industrial and agricultural products, to be used for supporting the armed struggle over a forthcoming time interval, were approved for the fronts and for specific time periods by the members of the SDC who were in charge of the various types of supply for the Army and Navy as well as of transport.

An important role in supplying the fronts was also played by the rear services of the Armed Forces which consisted of three echelons: regimental and divisional (tactical), operational, and strategic. The strategic rear services consisted of the rear services of the branches of armed forces and of a number of special administrative, support and supply organizations. This higher and central echelon of the rear services, the strategic rear, was closely tied to the national economy. All matters of supporting the armed struggle which required any sort of changes in the work of the national economy were brought up before the SDC and it, in comparing the needs of the Armed Forces with the economic capabilities of the country, gave the necessary instructions to the national economy.

Efficiency and effectiveness in the planning, production and distribution of weapons, ammunition, fuel and other items of materiel support were achieved due to the fact that, in accord with the political directions of the party Central Committee, the SDC effectively directed, coordinated and supervised the activities of the defense industry people's commissariats and the higher rear service organizations of the Red Army and united the efforts of the army and the people. The central and local state bodies which ran the wartime economy, the party, Komsomol, and trade union organizations of enterprises, and the leaders of the kolkhozes and sovkhozes under the difficult wartime conditions intensified their daily activities and focused them on supplying the front with everything necessary.

The work of the entire Soviet administrative system was directed and inspired by the party Central Committee, a true combat staff for the defense of the nation. During the war years more than 200 sessions were held by the Politburo, the Orgburo [organization bureau] and the Secretariat of the party Central Committee, and at these meetings all the most important problems of running a country at war were solved. The decisions of the party Central Committee and its organs related to military-political, military-economic and other matters of state importance were carried out through the Presidium of the USSR Supreme Soviet, the Council of People's Commissars, and also through the State Defense Committee and the staff of the Supreme High Command (Stavka). The party also led the wartime economy with the aid of the members of the Central Committee, who were responsible for its decisive areas, through the institution of sectorial secretaries for the most important types of military production, and with the aid of the party organizations of the Central Committee at enterprises, as well as through the political departments of the machine-tractor stations and state farms. Daily leadership and the diverse organizational activities of the Communist Party were an indispensable condition for creating a mighty wartime economy and for providing the army in the field with everything necessary. The party's slogan of "Everything for the Front, Everything for Victory!" became an absolute law of life for all the Soviet people. The party undertook energetic measures to organize the defeat of the enemy and to unify the efforts of the front and the rear.

Thus, in the past war the Communist Party acted as the collective organizer and leader of the Soviet people. It worked out an all-encompassing program for rapidly concentrating all material and human resources of the nation on the victorious waging and completion of the war. Under the leadership of the party, the management apparatus of the Soviet war economy showed its ability to solve successfully the most complex problems of mobilizing the human and material resources for the needs of the front.

The military and economic victory over a strong enemy was also a victory for the Soviet management system which embodied the advantages of socialism

over capitalism. These enormous advantages made it possible to create a powerful, effectively planned and organized war economy which surpassed the war economy of fascist Germany both in terms of the level of military production as well as in regard to organization and management.

* * *

The experience acquired in previous wars of managing a war economy can also be used in preparing the nation for defense in the event of a new imperialist aggression. In this regard the altered character of a possible new war is being carefully analyzed. American imperialism, which has been forced to consider the new balance of world forces, the powerful military and economic potential of the Soviet Union, and the possible consequences of a nuclear missile war, at the present time, as is pointed out in the documents of the International Conference of Communist and Workers' Parties, is placing special emphasis on local wars, without, at the same time, abandoning preparations for a general nuclear war against the socialist countries. The forces of war and aggression, as is pointed out in the Resolution of the 24th CPSU Congress, are actively at work in the other imperialist countries as well.

The destructive character of nuclear war, if it is not properly considered and prepared for, can create an extremely difficult situation for the economy and management system. In order to provide for the maximum vitality of the economic base and the management apparatus, they must be prepared ahead of time for the severe trials of war, and the economic management system must be improved, above all for military production and transport. It is important consistently to follow the scientific principles of economic management which derive from the very nature of socialist production and which were elaborated by V. I. Lenin and the CPSU and verified in practice in both peacetime and wartime.

Under a situation of the constant threat of military attack by imperialism on our country the task of strengthening its defense capability and armed defense is paramount in the activities of the Soviet state. The most important principle of all its bodies, including the economic management bodies, is the priority satisfaction of the needs of the country's defense and its armed forces. "...To help the Red Army in every way that each of us can help it," stressed V. I. Lenin during the years of the Civil War, "this is the primary, basic, and main duty of each conscientious worker and peasant..." (Complete Collected Works, Vol 39, p 152). During the nationwide struggle against the Hitler invaders this thesis was embodied in the practical deeds of the Soviet people who first of all satisfied the needs of the fighting heroic fronts of the Soviet Army.

In the postwar period the party and government, due to the complex international situation, are devoting special attention to strengthening the

material foundation of the country's defense. It could not be otherwise. Even in Lenin's well-known edict on economic work approved by the Ninth All-Russian Congress of Soviets in 1921 in relation to the transition of the country to peaceful construction, the industrial management bodies were ordered, along with producing goods for the population, not to allow the slightest letdown in carrying out the task of supplying the Red Army. The edict stressed that this "should be put first in the interests of maintaining the defense capability of the Soviet republic" (Complete Collected Works, Vol 44, p 335).

The primary satisfaction of the needs of the Armed Forces is a main Leninist principle, and it was and remains a most important one for the management bodies. "The Soviet state," according to the CPSU Program, "will take action to insure that its Armed Forces are powerful and possess the most modern means for defending the motherland...."

The 24th CPSU Congress noted with satisfaction that the party and its Central Committee constantly focus their attention on the problems of military organizational development and the strengthening of the might and defense capability of the Soviet Armed Forces. "The greatest possible rise in the defense might of our motherland and the indoctrination of the Soviet people in a spirit of great vigilance and constant readiness to defend the great victories of socialism," stressed the Resolution of the 24th CPSU Congress, "in the future as well should remain one of the most important tasks for the party and the people."[2]

V. I. Lenin proposed and established as a major principle of national economic management the principle of strict consideration of the economic laws of social development. He was a strong adversary of unsound, subjective economic and political decisions. Under present-day conditions the CPSU is also stressing the primary significance of the task of further raising the scientific level of production planning and management.

The Leninist demand of correctly combining political, economic, and military leadership is directly related to the principle of the complete consideration of the effect of economic laws in economic management practices. It stems directly from the teachings of V. I. Lenin on the relationship of politics and economics, and the role of the economy in war. Under war conditions, the principle of leadership unity serves as an important prerequisite for achieving victory. An essential condition for the success of the war, stated V. I. Lenin in 1919 in the draft directive of the party Central Committee on military unity," is the united command of all detachments of the Red Army and strictest centralization in directing all the forces and resources of the socialist republics, and in particular, the entire apparatus of military supply...." (Complete Collected Works, Vol 38, p 400).

The unity of leadership and the unity of the will of the party and the people during the Great Patriotic War were of decisive significance for achieving victory. United by a single will and a single desire, the workers, the peasants and the intelligentsia, the men and women, the Communists and Komsomol members, indoctrinated by the party and Soviet authority, were able to accomplish a feat which had not been equaled in history.

However, the principle of the unity of political, economic and military leadership in no way presupposes a mechanical merging of the entire function of management in one all-encompassing body. The principle of unity is the basis for uniting a complex aggregate of various management subsystems. On the basis of this principle diverse activities are carried out by the party and soviet, by the economic and defense organs led and directed by the party. In providing a unity of leadership, the CPSU at the same time stresses that the success of the matter depends upon a clear delimination of the functions of the individual organs, excluding the possibility of duplication.

The Leninist principle of the unity of leadership of the country, its economy and armed forces is of permanent significance. If imperialism unleashes a new war against us, then again, as V. I. Lenin teaches, "everything should be subordinated to the interests of the war, all the internal life of the nation should be subordinated to the war, without even the slightest deviation permitted on this score" (Complete Collected Works, Vol 41, p 117).

The Leninist principle of democratic centralism lies at the basis of the entire management process. Maintaining its essence, under peacetime and wartime conditions it manifests in varying degree a combination of centralism and democracy.

What will be the result of the specific features of applying the given economic management principle under wartime conditions? It will result primarily in the strengthening of centralism. "There must be exceptional solidarity of the Soviet forces, the strictest centralization of actions, speed and precision of execution, and the mechanism of Soviet power must be brought to perfection so that the defense capability of the nation can be raised to the proper level. Without this, there is no hope of victory over imperialism."[3] These words of Lenin from a decision of the Defense Council approved in 1918 are as valid as if he said them today.

The experience of the Great Patriotic War has substantiated that it was specifically the centralization of planning and leadership which insured the maximum concentration of the material and personnel resources in the decisive sectors of the Soviet wartime economy and thereby helped to achieve our victory. In anticipating the destructive character of a

future war, the prompt creation of conditions for the steadfast and uninterrupted functioning of a centralized management system assumes particular significance.

A rise in personal responsibility for the assigned job and the observance of the principle of one-man command are inseparably tied to centralism. In the "Outline of Rules for the Management of Soviet Institutions," V. I. Lenin pointed out that collective solution of any problems should be accompanied by establishing the most precise responsibility of each person for carrying out definite and clearly defined tasks and jobs. A wartime situation usually requires a restricting of collective leadership, the reduction of it to the "absolutely necessary minimum," and the brief discussion of only the most important questions "in the least extensive collective." The abuse of collective leadership in military affairs. V. I. Lenin pointed out, quite often leads inevitably to anarchy and catastrophe. "...The actual control of an institution, enterprise, concern, or task should be entrusted to one comrade known for his firmness, decisiveness, courage and ability to conduct matters efficiently, and who has the greatest respect" (Complete Collected Works, Vol 39, pp 45-46).

In the Accountability Report of the CPSU Central Committee to the 24th Party Congress Comrade L. I. Brezhnev, having recalled one of the basic Leninist principles of management, pointed out that an indispensable condition for all our work is a combining of collective leadership with personal responsibility for the assigned job. "When a decision is made, it should be perfectly clear who is responsible for it."[4] On all management levels it is important to define clearly the scope and correlation of rights and responsibility.

The effectiveness of management is determined by the strength of the ties between the leaders and the masses. Do not separate the leaders from the led masses or the vanguard from the entire army of labor -- this is a Leninist demand which has maintained its importance even in our times. The 24th CPSU Congress was the highest example of the unshakable unity of our party and the people. The source of the invincible might of Soviet society lies in the unity of the party and the people.

The reliability of management under socialism is achieved on the basis of the party recruitment, placement, and indoctrination of the management personnel. V. I. Lenin taught that the approach to selecting personnel should be: "a) from the standpoint of conscientiousness, b) from the political side, c) the knowledge of the job, d) administrative capabilities" (Leninskiy Sbornik (Leninist Collection), XXIII, p 164). The high ideological and political qualities of the leader should be combined with a clear mind, organizational talent, and authority. Authority, V. I. Lenin pointed out, must be "won by one's energy and by one's ideological influence," and not by ranks and titles.

A knowledge of the assigned job is one of the indispensable Leninist demands on the leaders. In order to manage, it is essential to be competent, it is essential to know all the production conditions completely and down to the smallest detail. In this sense life constantly places greater demands upon the personnel. "We need people who combine high political awareness with good professional training, who are capable of knowledgeably solving the questions of economic and cultural development, and who have mastered modern management methods."[5] Certainly, modern military production, and under wartime conditions the entire economy, converted to a wartime footing, also require precisely such skilled leadership.

The party has developed and promoted to leading positions a whole galaxy of highly skilled workers who are devoted to the motherland. The national economy now employs around 17 million specialists with higher and specialized secondary education. We have never had such skilled leadership as we have at present.

With the implementation of economic reforms the economic education of all the specialists is improving and the qualifications of production leaders are rising. In the new five-year plan the system for training and retraining personnel who manage production at all levels is consistently being expanded and constantly improved. The improvement in the knowledge of managerial personnel is being organized primarily in the area of Marxist-Leninist economic theory, the theory and practice of management, the scientific organization of labor, new methods of planning and economic incentives, and the use of economic-mathematical methods and modern computer equipment. The leading production workers are improving their skills in the Institute for the Management of the National Economy which was opened at the start of 1971 in Moscow. "On the construction fronts of the communist economy, science will win out, and this in essence is managerial science! For this reason, to study managerial science, and if need be, to retrain oneself, will be the primary duty of our personnel."[6]

The special training of military economists as well as the deepening of the military economic knowledge of officers and generals should become a matter of particular concern. The necessity has arisen of introducing a course of military economics into the military schools, and of deepening the special knowledge of the officials in the rear areas who have the job of improving the ties between the Armed Forces and the state planning and national economic bodies of the country. This necessity is the result both of the lessons of the last war as well as of the character of a possible new war and the complexity of the situation which it will create for combat operations, for the economic support of armed combat and the work of all the rear service echelons in supplying the troops.

To manage production means to foresee the path of its development. The main method of forecasting and the special function of managing socialist production is planning of the national economy. Scientific centralized

planning is an achievement of socialism which insures a continuous rise in the economic potential and defense might of our country.

As is known, in the material and technical support for our victory over Hitler Germany, an important role was played by the military administrative plans, including current planning as an operational form of production management. Creatively using the positive experience of the past and thoroughly considering the current needs of national defense, the economic mobilization plans must be constantly improved.

The successful solution to economic and defense tasks in peacetime is impossible without scientifically based long-range planning. "It is impossible to work without having a plan designed for a long period and for serious success," pointed out V. I. Lenin back in 1920 (Complete Collected Works, Vol 42, pp 153-154). In following Lenin's precepts, the 24th CPSU Congress has demanded an improvement in the methods of long-range planning for national economic development. The economic reform is helping to improve centralized long-range planning. Wider and wider use is being made of the methods of preliminary, economic-mathematical modeling which makes it possible, like long-range forecasting, optimally to plan the satisfaction of the growing demands of the population, the developing production and the strengthening national defense.

For our country, the economy of which is being developed and spreads over enormous expanses, the correct combination of the sectorial and territorial principles of production planning and management is of particular national economic and defense significance. The experience of the USSR wartime economy has shown that the sectorial system of industrial management successfully provided for the production of products for the front. Under the new conditions of industrial operations, the role of sectorial planning and production management is growing.

At the same time the problem of improving territorial planning and management of the economy for regions of the country is becoming acute. V. I. Lenin as early as 1921 in the draft of the "Edict of the Labor and Defense Council to the Local Soviet Institutions" demanded an unconditional pooling and coordination of work "for directing all local economic life" (Complete Collected Works, Vol 43, p 273). Even the last war made it essential to create a reliable base for production cooperation and management coordination within the boundaries of the economic region, the oblast, and the large industrial center, and strengthened the role of balanced development of our economic regions. The 24th Party Congress has demanded an optimum combination of sectorial and territorial planning so as to provide for the proportional development of the national economy and for a balanced solution to major national economic problems.

Material and moral incentives are also an important principle in socialist management. The vitality of this Leninist principle and its enormous creative force have been substantiated by the workers of the Soviet rear during the years of the Patriotic War. The experience of recent years has shown the increased significance of the principle of material incentives for the production collectives, including collectives of defense enterprises. At the same time the 24th Party Congress has reemphasized the necessity of continuously carrying out a policy of strengthening the role of moral incentives for labor, raising discipline and responsibility of each worker for carrying out the labor obligations placed on him, and for inculcating in the Soviet people a communist attitude toward labor.

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Thus, the problems of production management also involve management as a structure (the creation of management bodies by the various production sectors) and management as a process (the elaboration of the making of decisions, the organization and regulation of production, and accounting and control). It is inconceivable without an improvement in the organizational forms and methods of management, without the introduction of scientific organization of labor, and the use of new management procedures and equipment.

Under modern conditions scientifically organized management is impossible without the use of automation, electronic computers, without the methods of mathematical modeling and network planning. One of the most important new levers for improving management is electronic computer equipment and the economic-mathematical method usable with a computer for national economic planning and the elaboration of management decisions. The use of these technical means makes it possible to select the most rational ways for raising the productivity of social labor and promotes the greatest saving of time and labor in supervising civilian and military production.

The party and the government are concerning themselves about the creation and extensive use of the most modern computer devices and automated control systems in the national economy. For the purposes of improving national economic planning and management the Directives of the 24th CPSU Congress envisage in the new five-year plan the wide use of economic-mathematical methods as well as the use of computer and office equipment and communications. Work is expanding on creating and introducing automated systems for planning and managing sectors, industrial combines and enterprises. Over the long run there are plans to create a statewide automated system for the collection and processing of information required for accounting, planning and managing the national economy on the basis of a state system of computer centers and a unified automated network of national communications. At the enterprises automated control systems for

production processes are being widely introduced. They are helping to better organize the production of new types of industrial products, rationally utilize labor and material resources, as well as organize more efficiently the elaboration of technical documentation, financing, and production supply. It would be difficult to overestimate the importance of all this for improving defense production.

As a whole the tasks of strengthening national defense require a rise in the mobilizational readiness of the economy and production efficiency as well as an improvement in the style and methods of leadership. The problem of scientifically based management requires consideration of the entire complex of elements which influence one another. It is impossible to divorce the economic questions from the political, social or military, in the same manner that political or military questions cannot be separated from economic factors. The system for directing a socialist economy must promptly disclose all its capabilities and to a maximum degree capitalize on the reserves for providing a harmonious and optimum balancing of civilian and military production development under the conditions of the latest demands imposed by the international situation and the deepening scientific and technical revolution in the area of military affairs.

In the USSR and other socialist nations, in considering their national features the new requirements are being more fully considered, economic reforms are being carried out, and proper measures are being taken for growth of the economy and strengthening of defense. This debunks the views of the rightist and leftist revisionists and the supporters of various "new models of socialism," and strikes a blow at those who would undermine the leading role of the party, who would "separate the party from power," who would curtail the economic functions of the socialist state, who would ignore the objective economic laws of socialism, and who would violate the Leninist principles of economic management.

Struggling against revisionists of all hues, raising the management system to a qualitatively new level, and improving the style and methods of production management, the CPSU constantly turns to the Leninist management principles, and creatively applies them under modern conditions. In his time V. I. Lenin called for indefatigable work on establishing discipline and self-discipline, on everywhere strengthening organization, order, efficiency, harmonious collaboration of national forces, and universal accounting and control of the production and distribution of products, stressing that precisely "such is the way to creating military might and socialist might" (Complete Collected Works, Vol 36, p 80).

Firmly and constantly following the Leninist course, the party and the people in every way possible are strengthening the socialist state, improving the methods of national economic management, and increasing the

economic and defense might of the Soviet homeland. The Ninth Five-Year Plan will make a major contribution to strengthening the economic and military potential of our nation and the entire socialist community. The new five-year plan will ensure further growth of the defensive might of the Soviet Union and will strengthen the inviolability of our frontiers against any encroachments of an aggressor.

FOOTNOTES

1. KPSS i stroitel'stvo Sovetskikh Vooruzhennykh Sil (The CPSU and the Organizational Development of the Soviet Armed Forces), Voyenizdat, 1967, p 252.

2. Pravda, 10 April 1971.

3. Iz istorii grazhdanskoy voyny v SSSR (From the History of the Civil War in the USSR), Vol 1, Izd-vo Sovetskaya Rossiya, 1960, p 222.

4. Pravda, 31 March 1971.

5. Pravda, 31 March 1971.

6. Pravda, 13 June 1970.

# THE INITIAL PERIOD OF A WAR

## (Based on the Experience of World War II)

Army Gen S. Ivanov, Professor

World War II, which was started by the imperialist nations, inflicted incalculable death and suffering on the peoples of the world. It claimed more than 50 million lives and caused enormous destruction. The Soviet people, which made a decisive contribution to the defeat of the imperialist aggressors and to liberation of the peoples of the world from the threat of fascist enslavement, suffered particularly heavy losses in this war. Today, however, we are again witnesses to the fact of international imperialism, headed by the United States, whipping up war hysteria. A frantic arms race is being conducted and new military adventures hatched in the world's major capitalist countries. The Soviet Union stands as an insuperable barrier in the path of the warmongers. All the forces of socialism, peace, progress, and democracy are joining ranks around it.

The Communist Party of the Soviet Union, as the other brother parties, is making an enormous effort to frustrate the plans of the imperialists, to protect the conquests of socialism, and to secure the building of socialism and communism. "For protection of socialist conquests," stated L. I. Brezhnev at the International Conference of Communist and Worker Parties, "strength is essential, and considerable strength at that."[1] Today this strength is offered by the continuously growing defensive might of the socialist nations, and particularly by the high level of combat readiness and fighting efficiency of the Soviet Army and Navy, as well as the armies of the other Warsaw Pact nations. Of great importance for preparing these armed forces to repulse imperialist aggression is careful consideration of the experience of World War II, and particularly the most complex phase of that war -- the initiation phase.

Every war has had its own unique character, under the effect of a number of sociopolitical and historical conditions. War, stated V. I. Lenin, "is an extremely diversified, varied, complex thing" (Poln. Sobr. Soch. [Complete Works], Vol. 49, page 369). An interweave of numerous political, economic, military, geographic and other factors has dictated an extreme diversity of methods and techniques of a nation's preparations for and entry into war. This problem became particularly complex in the world wars, which involved dozens of countries in various parts of the earth and affected the vital interests of peoples.

History teaches us that the entry of nations into war has not constituted a single act but rather has comprised a certain period of time which has

been characterized by unique features which distinguish it from the subsequent events of war. In addition to the initiation of military operations, during this period an entire system of political, ideological, and economic measures was effected, connected with the nation's transition from peace to war. It is therefore not surprising that in military historical and theoretical investigations the process of the entry of nations into war has been identified as a specific, special period. It has been given different designations in different countries: "first period of the war," "first phase of the war," "initial period of the war," "preparatory operation," "initial phase of the war," etc. The problem of entry into war and conduct of initial military operations has long attracted the attention of politicians and military leaders, theorists and historians. The question of the initial period of war from a theoretical and military historical aspect has been discussed on numerous occasions in the Soviet military press. Many aspects of this complex phenomenon have been discussed in a number of works and articles on the history of World War II and the Great Patriotic War. Even today, however, this important area of historical experience demands further profound and comprehensive theoretical research. "Historians," states Minister of Defense Mar SU A. A. Grechko, "must do much more in order to provide an explanation and clarification, which is exhaustive as regards scientific substantiation, of the great and involved complex of problems connected with the beginnings of the last war... There is considerable food for thought here: the lessons of history have much to say which applies to today as well."[2]

In conformity with instructions by the Ministry of Defense, in recent years the General Staff Academy has done a considerable amount of work connected with research and synthesis of materials on war preparations and the entry of a number of major capitalist nations, as well as the Soviet Union, into World War II. This article shall examine, on the basis of completed investigations, several problems pertaining to the entry of nations into the war, which in our opinion are the most complex; we shall briefly discuss prewar views on its initial phase, the specific features of the initial phase in wars between imperialist nations, as well as the characteristic features of the initial period of the Great Patriotic War.[3]

Prewar Views on the Processes of Entry into War and the Nature of Initial Operations by the Major Bourgeois Nations

In making preparations for World War II, the politicians and military leaders of the imperialist nations persistently sought "recipes" for victory over their adversaries. They elaborated various doctrines, plans and strategic concepts. A special place in the plans of the imperialists was occupied by preparations for and the conduct of a war against the Soviet Union, with the aim of destroying the socialist system and restoring capitalism in the USSR. Reactionary groups in Great Britain, France and

the United States made every effort to focus the aspirations of aggressive nations (Germany and Japan) toward the Soviet Union. They were counting on satisfying the predatory appetites of the fascist states at the expense of the Soviet Union and at the same time, weakening Germany and Japan to a maximum degree, on preserving their colonial possessions. The rulers of Nazi Germany and militarist Japan in turn, pursuing the same aim -- war against Communism and destruction of the Soviet Union -- intended to achieve this objective following an abrupt increase in their military-economic potential and an improvement in their strategic position through the seizure of neighboring countries and weakening the political, economic and military strength of the United States, Great Britain, and France. An unchecked arms race took place in both imperialist coalitions on this basis.

During the two prewar decades there occurred a sharp increase in quantity and improvement in quality of new military equipment and arms, which ensured a substantial increase in the combat capabilities of armed forces, sharply increased their firepower, maneuverability, effective range and capability to mount massive attacks to considerable depth. Maintenance of large and well-equipped armed forces in peacetime, the ability to make them combat ready on short notice, and an improvement in mobilization systems made it possible substantially to increase the military strength of nations in a short period of time, as well as their ability to respond flexibly to changes in the political situation.

All this created realistic preconditions for altering the methods and processes of entry of nations into war and made it possible under favorable circumstances to mount large-scale operations with decisive objectives at the very outset of war. Therefore a number of large capitalist nations, particularly Germany and Japan, began elaborating various theories and strategic concepts which provided for maximum activation of military operations from the very initiation of war. They found expression in the official military doctrines of these nations and exerted decisive influence on elaboration of operational-strategic war plans.

## Aggressive Strategy of the Fascist Bloc Nations

The military doctrines and strategic plans of the nations of the fascist bloc (Germany, Japan, Italy) were of a clearly-expressed aggressive nature. The military-economic potential of these nations was substantially less than the overall potential of their potential adversaries. Therefore the political and military leaders of these nations endeavored to resolve the conflict between the far-reaching military and political objectives of war and their nations' limited military-economic potential by means of waging swift "blitzkrieg" wars. This led to extreme adventurism in the theory and practice of warfare. The task of military theory reduced to a search for the "secret of victory," to elaboration of special methods of warfare

with the aid of which it would be possible to destroy a potentially superior adversary. Primary significance in connection with this was attached to prior preparation of the country and its armed forces for war on a predetermined timetable, the element of surprise in the initial attack, as well as problems of careful preparations for and conduct of initial operations, which would decide the outcome of the war or at least predetermine it.

The military theoretical views of Nazi Germany were based on the notorious doctrine of "total war" and the strategy of "blitzkrieg," elaborated on the basis of the political and ideological principles of Nazism with its program of expansion of "Germany's lebensraum" by enslaving neighboring countries, including the Soviet Union, with subsequent conquest of world hegemony.

Theoretically Nazi Germany's leaders believed that the war for world hegemony as a whole would be a long and protracted one. During the course of this war they planned to destroy their adversaries in sequence, one after another, in blitzkrieg campaigns conducted at specific intervals. Sequential defeat of Germany's enemies and the occupation of their territory would ensure a gradual increase in Germany's military-economic potential. The foreign policy isolation of the next victim of aggression and its internal political disintegration were considered the most important prerequisites for the success of a blitzkrieg launched against individual countries.

Decisive significance for achieving war aims was attached to initial (first) operations, during the course of which defeat would be dealt to the main ground, air and naval forces, with disruption or halting of mobilization and strategic deployment of the adversaries' armed forces, thus predetermining a favorable subsequent course and outcome of the war. A special role was assigned to an initial massive surprise attack, the devastating force of which would shatter the enemy's entire defense system during the very first hours and days of the war, disorganizing the enemy's processes of government and military control. An invasion was to be initiated without declaration of war. Fundamental steps to achieve armed forces mobilization and deployment would be taken prior to the war in order to succeed in launching a powerful surprise attack. Air power and armor would constitute the principal force in mounting the first attack and in the conduct of initial operations.

Japan, just as Nazi Germany, was counting on a surprise attack and the enemy's state of unpreparedness to repulse the aggressor in a war against the Soviet Union as well as against its imperialist rivals. In order to ensure adequate force and surprise of the initial attacks, Japanese military theory specified, just as did German, implementation of basic

mobilization measures and strategic deployment of the armed forces prior to the war; this theory was incorporated by the Japanese military leaders in the concrete operational-strategic plans for war in the Pacific. A leading role in the war against Great Britain, the United States and the Netherlands was assigned to the navy, the operations of which would secure supremacy on the seas at the very outset of the war and the successful conduct of large-scale amphibious landing operations jointly with ground forces. Japanese military leaders considered powerful carrier task forces, land-based aircraft and large forces of surface units as the main instrument in performing these missions.

This is a brief summary of the military theoretical views of ruling circles in the fascist bloc nations on methods of initiating a war and the character of military operations in the initial period of a war.

Temporizing Policy and Defensive Strategy of the Anglo-French Bloc Powers

The military doctrines and strategic plans of Great Britain, France and their allies differed greatly from the military doctrines and strategy of the nations of the fascist bloc, particularly as regards methods of entry into a war and the conduct of initial operations, although they also were imperialist and expansionist in their political essence. Possessing an enormous military-economic potential, which could be fully utilized in case of war, these nations were inclined more toward a strategy of exhausting the enemy and provided for maximum military effort not at the outset of a war but in the final phase, waiting for the most favorable moment to apply a decisive military effort.

These views were dictated primarily by the anti-Soviet nature of the policies of the ruling circles in the Western nations, who were endeavoring to direct the aggression of the fascist states toward the Soviet Union, in order to weaken them in mutual struggle and subsequently to dictate their own terms. This is what dictated the temporizing policy of the nations of the Anglo-French bloc, a policy which in the military area resulted in a defensive strategy.

An orientation toward a defensive strategy at the beginning of a war was most clearly manifested in France. French military theory failed adequately to consider the radical changes which had taken place in military affairs and seemed to stagnate at the level of World War I art of warfare. Criticizing this system of views, General de Gaulle wrote: "Concepts prevailing in the army dated from World War I... The idea of trench warfare comprised the basis of the strategy they were planning to employ in a future war. This strategy determined troop organization, training, armament and military doctrine as a whole."[4] These concepts, with slight modifications, formed the basis of the plans with which France entered World War II.

British ruling circles, following the traditional policy of letting others do the fighting, planned to push the burden of the war on land onto its partners: France, Poland, and others. They would contain and in a protracted war exhaust the manpower and resources of Germany and its allies, enabling Britain to achieve its military and political aims with a minimum expenditure of effort.

This policy and strategy were characteristic of the United States to an even greater degree. U.S. ruling circles intended to refrain up to a certain time from intervening in a war between rival European nations. The United States intended to enter the war in its final phase as a "third force" and, supported by its economic and military might, to enjoy the fruits of victory, dictating terms of peace to both victors and vanquished.

It is obvious from the above that the Western powers did not intend to engage in vigorous combat operations in the initial phase of a war against the bloc of fascist states. In the land theaters they planned to restrict themselves to trench warfare, while at sea, taking advantage of their superiority of forces, they would organize a naval blockade against the enemy, with the aim of depriving him of external resources for the waging of war. In spite of certain peculiarities, the strategic views of the military and political leaders of great Britain, France and the United States pertaining to the initial phase of a war were permeated with ideas of defense, the aim of which consisted in opposing a "blitzkrieg" war with a long, drawn-out war, aimed at exhausting the enemy, gaining time in order to fully deploy one's military-economic potential. On the other hand, the ruling circles of the Western imperialist states believed that they would be able to turn Nazi Germany's aggression away from themselves and direct it toward the USSR; they would take advantage of the mutual weakening of the USSR and Germany in order to achieve their imperialist aims.

Thus the opposing coalitions of imperialist nations, with a common ultimate aim of destroying or seriously weakening the USSR, also had their own special objective, which they intended to achieve at each other's expense. This determined in large measure the difference in views on methods and procedures of entering a war, as well as the role and character of initial operations.

Characteristic Features of the Initial Phase of the War in the European and Pacific Theaters

World War II, which was fought between imperialist blocs, began on 1 September 1939 with Nazi Germany's attack on Poland. Subsequently other nations were drawn one by one into the war; gradually expanding, it spread to more and more parts of the world.

The entry of nations into World War II occurred in sequence. Initially the war broke out in Europe between Nazi Germany and the Anglo-French bloc, which included Poland as an ally. German aggression then extended into a number of Balkan nations (Greece, Yugoslavia), culminating in their occupation. Having enslaved practically all of Europe, Nazi Germany and its satellites attacked the Soviet Union. Thus began the Great Patriotic War, which became the principal content of World War II. Several months after the Nazi coalition attacked the USSR, militarist Japan initiated a war against the United States and its allies in the Pacific. With the entry of the Soviet Union and the United States into the war, the flames of war enveloped all continents, assuming a genuinely worldwide character.

One can identify an initial phase in all wars which comprised elements of World War II. The features of this period were usually manifested most fully in protracted wars between major powers and coalitions. Therefore we shall initially examine the characteristic features of the initial phase of the war in Europe in 1939-1941 and the specific features of the initial phase of the war in the Pacific.

## Initial Phase of the War in Europe

The principal adversaries in the war in Europe were Nazi Germany on the one hand and, on the other, the two leading nations of Western Europe -- Great Britain and France, and their ally, Poland. One feature of the genesis of this war consisted in the fact that it began with an attack by Nazi Germany not against its main Western European adversaries but rather on their weaker ally, Poland, a large part of the armed forces of which were not mobilized or combat ready.

The initiated war was marked by the absence of coordinated efforts by the Western powers, which enabled the aggressor to attack its adversaries in sequence and to force them to retire from the war one at a time. First Nazi Germany crushed Poland, and then Denmark and Norway; a similar fate awaited Belgium, the Netherlands, and France. Great Britain alone succeeded in avoiding total defeat, although it did sustain heavy losses. These results of the war in Europe were dictated by a number of causes of a political and military character.

The governments of France and Britain, endeavoring to direct Nazi Germany's aggression eastward, against the Soviet Union, refused to accept Soviet proposals of collective security. Implementing the Munich policy and encouraging the aggressor, they were willing to see their ally, Poland, become Germany's next victim after Czechoslovakia. Great Britain and France were hoping that after seizing Poland Germany would immediately turn on the USSR. Precisely for this reason the Anglo-French ruling circles at the very outset of the war selected as the principal method of combat

operations a strategic defense during the course of which it was planned to repulse possible enemy attacks, to amass the requisite forces and to ready them for the attainment of the principal military and political aims in the subsequent phases of the war.

At the time of the attack on Poland, Nazi Germany was not yet prepared for a major war. At that time it possessed forces (about 100 divisions) adequate only for waging war against Poland and establishing a fairly weak screen against its Western allies. Taking advantage of the waiting policy of the Western powers, the Nazi German leaders decided first to attack Poland and simultaneously to continue at an accelerated rate to deploy Germany's armed forces and to gear German life and the German economy to the needs of a war for the winning of world supremacy.

The Soviet Union was the principal obstacle in Germany's path toward world supremacy. Aware of the fact that available forces were clearly insufficient for a war against the Soviet Union, Nazi Germany's leaders made a decision, following the crushing of Poland, to destroy France and Great Britain and to remove them from the war. After this, having secured their rear and having at their disposal all the military and economic resources of Western Europe, they planned to embark upon a campaign against the USSR.

The leaders of bourgeois Poland, pursuing an antipopular and anti-Soviet policy, were counting in their strategic plans on assistance from their allies, Great Britain and France. The war plan of the Polish General Staff called for "inflicting maximum losses on the Germans and holding out until the Allies initiate operations in the West." But the Allies initiated no such operations. Poland, which was being attacked by numerically superior German forces, began to crumble. By the 10th day of the war the Nazi German Command, confident of victory, began transferring large units from Poland westward; after the end of the Polish campaign they proceeded to regroup their main forces toward Germany's western borders.

While the Polish Army was being chewed up by the Nazi war machine, Poland's Western allies, while having formally declared war against Germany, were not giving Poland the promised assistance. At the beginning of September 1939 France, having largely completed mobilization, deployed its armed forces along the frontier. One force occupied the "Maginot line," while the other was massed on the French-Belgian border, prepared to march to a deployment line in Belgium and Holland. Britain began gearing its industry to the needs of war, was conducting limited operations at sea, was mobilizing, was forming new large units and transferring an expeditionary corps to the continent. Britain and France conducted no active operations on the ground and in the air during Germany's Polish campaign, in spite of favorable conditions for dealing Germany a decisive blow. This was the so-called "bizarre war," dictated exclusively by the political considerations of directing German aggression eastward, thus diverting the threat of attack from Britain and France.

The German-Polish War and the military-political and economic measures taken by the belligerents during this time comprised the content of the initial phase of the war in Europe, which lasted slightly more than 1 month, that is to the end of October 1939. During this time Nazi Germany achieved its immediate strategic aim -- it had removed Poland from the war and was now able to concentrate its main efforts against England and France. The German command, in conformity with the French invasion plan (Plan Gelb), began massing troops along its western borders and engaged in intensive preparation of these troops for decisive operations in Western Europe. Britain and France in turn, which were in a state of war with Germany, were faced with the fact of immediate conduct of military operations by their armed forces against the German Army. The Anglo-French ruling circles, although continuing their political maneuvering in the spirit of the "bizarre war," in order to avoid a showdown with Germany, nevertheless stepped up the effort to gear to a war economy and engaged in a desperate effort to draw neutral countries to their cause -- Norway, Sweden, Denmark, Belgium, the Netherlands, as well as several Balkan countries -- Greece, Turkey, and Yugoslavia. On the whole the measures conducted by both belligerents in a military, economic, domestic political and diplomatic respect from October 1939 to the spring of 1940 were aimed at preparing for a new phase in the war in Europe, during the course of which the fate of the principal adversaries would be resolved.

The initial phase of the war in the European theater was characterized by new features and trends which were not characteristic of the initial phase of World War I. In World War I mobilization and strategic deployment were effected principally after the declaration (initiation) of war, while in World War II a considerable part of these measures were effected prior to the outbreak of hostilities by those nations which took upon themselves the initiative of attack. For example, Germany attacked Poland with prior mobilized and deployed forces. This was secured by a more flexible system of mobilization, prior gearing of the economy to a war footing, secret deployment of strategic forces, and careful concealment of all preparations.

Since Nazi Germany was carrying out all these measures in conformity with a planned war timetable, it possessed considerable advantages for a sneak attack. Exploiting these advantages, Germany continued to follow the practice of attacking each of its adversaries suddenly, without declaring war. The Nazi leaders did not feel bound by the standards of international law. They believed that the strategic advantages to be gained from a sneak attack made up for the political and moral detriment.

Thus the above-mentioned new trends in the content of the initial phase of the war in Europe were manifested primarily on the German side. During this period France and England were carrying out primarily the same

measures they had implemented in World War I in preparing for decisive operations against the principal adversary: mobilization, troop deployment, establishment of strategic dispositions, etc.

Radical changes occurred in the content and character of initial operations. For example, the war against Poland was planned as a single strategic offensive operation with the objective of quickly crushing the main forces of the Polish Army. The main role in achieving this objective was assigned to the Luftwaffe and Panzer units. Massed German air strikes on airfields, railroad yards, and troop concentration sites ensured rapid establishment of air supremacy, disrupted troop mobilization and deployment, and disorganized government and armed forces control. The employment of great numbers of tanks and the superior mobility and maneuverability of the Nazi German Army enabled it rapidly to penetrate the defense, to cut the front up into segments, to encircle and destroy isolated Polish Army units. The situation in which the Polish Army found itself was made extremely difficult by the fact that it was not completely mobilized when the invasion began, nor was its strategic deployment completed. Nazi Germany won the war against Poland, and the strategic defense of the Polish armed forces failed, although many Polish units and large units offered heroic resistance to the Nazi invaders.

Following the Polish campaign and up to the spring of 1940 no vigorous combat operations were conducted by Germany or by Britain and France, which had declared war on Germany. Anglo-French ruling circles continued the "bizarre war," in the hope of directing Nazi aggression against the USSR. Continuing their anti-Soviet policies, the rulers of Britain and France went so far as to engage in a serious discussion of the possibility of landing an expeditionary corps in Finland with the mission of intervening in the Soviet-Finnish War and, invading Soviet territory, cutting the Leningrad-Murmansk rail line. In April 1940 consideration was given to a plan concocted by the British Air Force Command, which called for destroying the oil fields in the Caucasus.[5] Implementation of these plans was thwarted by the ending of the war between the Soviet Union and Finland and the signing of a peace treaty.

Taking advantage of the inactivity of Britain and France, the Nazi German leaders succeeded in carefully preparing by April 1940 for a decisive campaign in the war against the Anglo-French coalition. Germany's land army was increased to 157 divisions. The German Command established three strategic forces -- one directed against Denmark and Norway, a second facing Belgium and Holland, and a third (the main force) facing France, to attack through the Ardennes toward Abbeville and the English Channel. By 10 May 1940 a total of 130 divisions were deployed on the western frontier. The British and French leaders and their potential allies -- the governments of neutral countries (Belgium, the Netherlands) -- during

this time had failed to prepare adequately to repulse the onslaught of the deployed German attack forces.

Methods of conducting combat operations which had been used in the Polish campaign were further refined in the operations initiated in the spring and summer of 1940 in the Western European Theater. A characteristic feature of these operations was the fact that initially Nazi Germany launched sneak attacks on Denmark and Norway, followed by a crushing attack on France, Belgium, and the Netherlands. The latter two countries, maintaining during the "bizarre war" a policy of neutrality and having failed to complete strategic deployment of their armed forces, quickly surrendered at the first offensive thrusts, without utilizing all their capabilities of effective resistance. The surrender of the Belgian and Dutch armies hastened the rout of the Anglo-French forces in Belgium, the Netherlands and Northern France, which enabled the Nazi German Army to achieve an abrupt change in the correlation of forces (particularly in tanks and aircraft) and to occupy an advantageous strategic position to deal France the coup de grace. The defeat demoralized the French command, sapped the army's will to resist and intensified inclinations to surrender on the part of the French political leaders. All these factors predetermined the early collapse of France.

To an even greater extent than in Poland, a decisive role in the success of the Nazi German forces was played by utilization of massed aircraft and tanks. The employment of powerful forces of mobile troops in the forward echelon, with continuous air support, provided military operations with a degree of maneuverability and dynamic character, as well as sharply increasing the pace of operation development. The strategic defense of the Anglo-French troops suffered total collapse under the onslaught of such forces. The major causes of this, in addition to sociopolitical factors, were substantial errors in preparing for and the methods of conducting defensive operations, expressed in an inability to organize a strong, deeply-echeloned defense backed up with a sufficient quantity of strategic reserve, antitank and air defense weapons.

### Features of Initial Phase of the War in the Pacific

The war in the Pacific was planned and initiated under conditions whereby the Western European nations had been defeated in war against Nazi Germany, while the Soviet Union was standing alone, waging a heroic struggle against the united forces of the fascist bloc. The most militaristic of Japan's leaders believed that the right moment had come to initiate a war for division of colonies and spheres of influence. They decided temporarily to postpone military action against the USSR in the anticipation of "decisive success" by the German armies, and to initiate a war for the seizure of the Pacific and South Asian colonies of Britain, the Netherlands and the

United States. The United States in turn, fearing a further strengthening of Japan, began to step up economic pressure on it, simultaneously building up its armed forces in the Far East.

The Japanese militarists, as the German Nazis, intended to implement their plans of seizure of the rich strategic raw materials of the Philippines, Malaya, Indonesia, Thailand and Burma by mounting a series of swift operations, viewing them as the first or initial phase of a war.[6] The Japanese leaders were planning subsequently to take advantage of the weakness of the Soviet Union, which was being engaged against Nazi Germany, in order to seize the Soviet Far East and Eastern Siberia as far as Lake Baikal.

The United States and Great Britain, adhering to a defensive strategy, were hoping that Japan would first attack the Soviet Union. In case of a Japanese attack on their possessions, the Allies were planning to defend strategically important areas in Southeast Asia and the Pacific Basin, to crush the Japanese navy with the joint forces of the U.S. Pacific Fleet, the British and Dutch navies, thus ensuring favorable conditions for subsequent efforts.

The war in the Pacific was initiated with a sneak attack by Japanese naval and air forces on the main forces of the U.S. Pacific Fleet at Pearl Harbor, by an attack on airfields in the Philippines and by amphibious landings in Malaya. Japan was fully prepared for the attack on the basis of a predetermined timetable, while its principal adversary, the United States, had not yet completed its preparations for war.

The principal content of the initial period of the war in the Pacific Theater, which ran from December 1941 to April 1942, constituted a general strategic offensive by the Japanese armed forces over vast areas of the Pacific and Southeast Asia, and the conduct of strategic defense by the United States and its allies. The Japanese offensive, taking into consideration the specific features of an ocean theater and the enemy's disposition of forces, was waged simultaneously by several forces on independent strategic axes until completion of their missions. Their actions comprised a system of simultaneous and sequential operations, the most important of which were: the Hawaiian Naval Operation, aimed at destroying the bulk of the U.S. Pacific Fleet; the Philippine Amphibious Landing Operation; the Malayan and Java Amphibious Operations.

From the very first days of the war military operations assumed a vast spatial scope, from the Hawaiian Islands to the Strait of Malacca, and were waged simultaneously on land, sea, and in the air. Initial strikes by Japanese naval and air forces resulted in destroying and putting out of commission the main forces of the U.S. Pacific Fleet at Pearl Harbor in the

Hawaiian Islands, the principal U.S. naval base in the Pacific; U.S. air capability in the Philippines was destroyed, while the British sustained heavy losses in aircraft and naval ships in Malaya. The success of these attacks ensured Japanese air and sea supremacy, which in turn created favorable conditions for the landing of large amphibious forces. Sea and air supremacy was consolidated by the seizure by assault forces of enemy naval bases and airfields and the rapid rebasing of Japanese forces to these facilities. The decisive factor in the effort to gain sea supremacy was air power, and particularly carrier-based aircraft. In connection with this fact, aircraft carriers were viewed as the principal naval offensive threat. Large-scale amphibious landing operations carried out in close coordination among all services, as well as rapid maneuver by sea and air provided the Japanese forces with great depth and a high rate of advance.

The swift advance of the Japanese, who were totally in command of the initiative, thwarted all Allied attempts to organize resistance on important strategic lines. Substantial Allied forces failed to check the enemy's advance. The Anglo-American Command was unable to withdraw its forces from attack and to organize defense. The Japanese sea and air supremacy made it impossible for the Allied command to effect prompt transfer of reserves to threatened points. The defensive actions of the demoralized Allied troops were of an uncoordinated nature and as a rule ended in hasty withdrawal and surrender.

The Japanese achieved major strategic results in the offensive operations of the initial phase of the war. They quickly succeeded in crushing the principal enemy strategic forces over a vast theater of war. Allied naval and air forces sustained enormous losses, were defeated and surrendered: the British at Singapore, the Americans in the Philippines, and the Dutch on Java. Over a period of 5 months the Japanese armed forces achieved the following stated objectives: they occupied the Philippines, Malaya, the Dutch East Indies, Thailand, Burma, etc. The strategic defense of the Allies was a total failure. Sustaining heavy losses and losing vast territory to the enemy, the Allies were forced to reestablish strategic defense on the immediate approaches to India, Australia, the Hawaiian Islands, and Alaska. The next phase of the war in the Pacific began in May-June 1942 with the fighting for these strategic areas.

The initial phase of the war in the Pacific greatly influenced the entire subsequent course of military operations between Japan on the one hand and the United States and its allies on the other. During this phase Japan achieved considerable success. It captured enormous territory containing a population of more than 150 million and rich resources of strategic raw materials. This could not, however, predetermine the outcome of the war, since the vital centers of the Allies had not been touched, nor had their military-economic potential been destroyed. At the same time the seizure

of these territories was an important factor in Japan's waging of a protracted war in the Pacific. It took the American armed forces 3 years of intensive military operations in order, in partnership with their allies, to nullify the results of the initial operations and to gain a decisive superiority over the enemy.

* * *

To recapitulate, World War II, initiated by the imperialists, brought mankind incalculable suffering and losses. The initiators of this war were aggressive nations in which fascist regimes had been established and in which the most reactionary segments of the imperialist bourgeoisie had come to power. The governments of the so-called "Western democracies" rejected Soviet proposals calling for the establishment of a system of collective security and thus encouraged the initiation of World War II as an imperialist war, an unjust war as regards the principal capitalist nations taking part in it.

The anti-Communist policy orientation of ruling circles in the United States, Great Britain and France, and their endeavor by means of concessions to encourage Germany to go to war against the USSR enabled Germany to prepare for war in advance and to seize in sequence, by means of sneak attacks, a number of countries in Central and Western Europe. Poland, Norway, France, Belgium, and the Netherlands were unable to stand up against the aggressor's onslaught and were soon crushed. A decisive role in this was played by the fact that the aggressor was able to beat its adversaries in deployment of forces, as well as the factor of the sneak attack and the resolute character of initial operations, conducted by main forces and the massed employment of armor and air power. The strategic defense of the Allies in Western Europe was a total failure; In 2 years of war aggressive German Nazism succeeded in enslaving almost the whole of Western Europe.

The Japanese militarists, having planned and prepared in advance for an attack and the vigorous conduct of decisive operations in the Pacific and Southeast Asia, also achieved major strategic results in the initial phase of the war. The strategic defense conducted by Great Britain, the United States and their allies in the Pacific Theater was a total failure and was reestablished at the cost of heavy casualties and the loss of vast territory. They were able to reestablish defense only because the overseas vital centers of these nations had not been subjected to attack, while Japan's ally, Nazi Germany, was being fully held and contained by the heroic resistance of the Soviet Armed Forces.

Thus in wars between capitalist nations the aggressor, employing the sneak attack and the power of predeployed forces, achieved his stated objectives in the initial phase of the war. The capitalist nations which were the

victims of this aggression were unable to prevent their adversary from carrying out his plans; they suffered major defeat, which led either to surrender or to the loss of all the territories the aggressor had intended to seize in the initial operations. The initial phase of the Great Patriotic War was different, although it did contain some common features characteristic of World War II as a whole. The features of the initial period of the Great Patriotic War will be examined in the second part of this article.

FOOTNOTES

1. Mezhdunarodnoye Soveshchaniye kommunisticheskikh i rabochikh partiy. Dokumenty i materialy (International Conference of Communist and Worker Parties. Documents and Materials), Politizdat, 1969, page 51.

2. Voyenno-Istoricheskiy Zhurnal, No 6, 1966, pp 4, 6.

3. The initial phase of the Great Patriotic War will be examined in the second part of this article.

4. Sharl' de Goll': Voyennyye memuary (War Memoirs), Volume 1, Izd-vo inostrannoy literatury, 1967, page 34.

5. "What History Teaches," Pravda, 6 January 1971.

6. S. Khayasi: Yaponskaya armiya v voyennykh deystviyakh na Tikhom okeane (The Japanese Army in Military Operations in the Pacific), translated from English, Voyenizdat, 1964, pp 51-53.

## THE 50TH ANNIVERSARY OF VOYENNYY VESTNIK

Over a 50-year period the combined-arms journal Voyennyy Vestnik (Military Herald), an organ of the Ministry of Defense, along with the other military periodicals has taken an active part in training and indoctrinating Soviet military personnel and in contributing to the organizational development of the Soviet Army, to the organization of the military and political training of the troops, to the development of weapons and military equipment, to the resolution of problems on the tactics of modern warfare, and to the preparation of regulations, instructions, firing courses, and training programs.

The editors and the editorial staff see their main job in providing to readers a complete and thorough explanation of party and government policy which is aimed at successfully building a communist society, in contributing to the indoctrination of military personnel in a spirit of the all-conquering ideas of Marxism-Leninism, in helping the commanders and political workers in the improvement of professional skills as well as in the training and indoctrination of personnel.

The first issue of Voyennyy Vestnik appeared on 15 May 1921. It was published as an organ of the department of military literature under the Revolutionary Military Council of the Republic and was initially published twice a month.

The editorial of the first issue of the magazine entitled "Our Tasks," stated: "The victory for the arms of the revolution has been a collective concern and a triumph of the entire Red Army, from the Red Army man to the commander in chief. The journal, which has the task of analyzing these victories and drawing from them all the theoretical and practical conclusions, should also be a matter of common work for all the personnel of the Red Army... It is time to make the results of the collective creation of the defenders of the banner of the Revolution available to all so that they can serve to our benefit."

Around the journal there began to form a broad group of authors consisting of famous proletarian military leaders, experienced combat commanders, political workers and military specialists. The journal was directed by prominent military figures. Thus, the members of the editorial board in various years included: M. V. Frunze, K. Ye. Voroshilov, A. S. Bubnov, S. S. Kamenev, M. N. Tukhachevskiy, A. I. Yegorov, I. E. Yakir, I. P. Uborevich, P. M. Lebedev, V. K. Putna, I. S. Unshlikht, and others.

Military scientific work began to expand in the troops, in the military schools and institutions, and the first Soviet military correspondents and

historians began to be trained. The journal devoted great attention to the organization and work of the military scientific societies and provided them with great help. In this regard, of interest is the appeal of the Military Scientific Society of the Worker-Peasant Red Army Academy and of the Higher Academy Courses published in Voyennyy Vestnik in 1924.

Here are a few excerpts: "The printed word holds a most prominent place in scientific military research and the dissemination of military knowledge, which are the basic tasks of the military scientific organizations... For this reason we view the dissemination of the printed word among the armed forces as one of the constant concerns of the military scientific organizations. Here, we consider the dissemination of Voyennyy Vestnik as an immediate task, since, in our view, it raises and analyzes the most urgent questions for the armed forces, it helps Soviet troops to carry out the training tasks entrusted to them, it maintains a lively discussion of debated questions, it analyzes the experience and the achievements of the military scientific movement, and reflects the conditions of service life... We are firmly convinced that the broad distribution of the military press, and in particular Voyennyy Vestnik, will lead not only to the absorption of what is being published, but will also evoke a whole series of new ideas which can be found on the pages of our press, which, in turn, will make it even richer in content.

"Thus, our appeal to all organizations and individual members--disseminate the military press. Begin this with Voyennyy Vestnik. It is essential to see to it that each member of the command acquires and reads Voyennyy Vestnik."

During those years Voyennyy Vestnik devoted a great deal of attention to questions of the political indoctrination of commanders and explained the policy of the Communist Party on international and domestic issues, including the organizational development of the Red Army. Along with this on its pages the journal brought up and widely discussed such important military theory subjects as "The Role of Cavalry in the Civil War," "The Significance of Maneuvers in the Civil War," [illegible] "Nighttime Warfare," "Maneuvering as a Combat Method," [illegible] "Tanks in the Last European War," "The Essence of Military Art," "The Role of Cavalry in a Future War," "Are the Armored Units a New Combat Arm," "Coordinating the Actions of Cavalry with Aviation," "On the Question of Military Psychology," and so forth. The responses to these articles as well as the articles by the troop commanders giving descriptions of examples of combat played an important role in the training and indoctrination of all the personnel.

The commanders of the young Red Army constantly assimilated and developed the new Soviet art of warfare worked out by our party and its leader V. I. Lenin on the basis of the principles of the revolutionary strategy

and tactics of the proletariat, the new production relationships, and the new social order created by the Great October Revolution.

One of the most important tasks of the journal over the entire 50-year period has been, considering the development of the principles of operational art, to raise and discuss problematical phases of tactics and to help subunit and unit commanders develop common views on the organization and conduct of combat as well as on the coordinated use of subunits from the various combat arms and special troops in combined arms combat.

In carrying out this responsible task Voyennyy Vestnik proceeded above all from a generalization and study of the experience of the combat of our Armed Forces against the numerous enemies of the Soviet homeland during the years of the Civil War and military intervention by the imperialist states, the experience of the battles and engagements with the Japanese imperialists at Khasan and Khalkhin-Gol, and, of course, of the Great Patriotic War of the Soviet Union against Nazi Germany and imperialist Japan.

The subject matter of the journal relating to these questions was organized in full accord with the development stages of Soviet Army tactics.

During the period of the Civil War the Red Army did not have its own tactics which had been elaborated ahead of time. Created and developed in fierce battles, it absorbed the experience of the armed struggle of the Russian proletariat in three revolutions, used the rich combat traditions of the Russian people, and borrowed all the best from the art of warfare of the capitalist countries' armies. The soldiers and military specialists who had lived through the crucible of World War I also contributed much that was of value to the combat theory of the Red units. However, the tactics of the young Red Army from the very outset had their own features, inherent solely to it, which were dictated by the objective and character of the Civil War, by the class composition of our army, by its organization and technical equipment.

The political goals of the Civil War imparted a decisive character to the art of warfare, and hence, to tactics. The high moral and political state of the Red Army personnel increased their combat capabilities and was the basis of the active, bold and daring actions of units and subunits.

The new command personnel who had been produced by the revolution and indoctrinated by the Communist Party in the course of the war played an important role in working out tactical methods in combat. However, while possessing good combat experience, they still did not have systematized theoretical military and technical training. The commanders and political personnel, the soldiers and the junior commanders were very strongly

attracted to military knowledge and training. In this they were helped greatly by Voyennyy Vestnik. The materials published in it described the combat experience of the Red Army and the development of Soviet military art which was permeated with the spirit of revolutionary creativity and true innovation. The journal widely propagandized the combat traditions of the Red Army, and contributed to the military patriotic indoctrination of the men using the heroic experience of the struggle by the party, the Soviet people and the Armed Forces themselves. It did a great deal to create a history of the revolutionary regiments, regularly publishing articles devoted to the anniversaries of the famous units and combined units.

The journal rapidly acquired authority among the troops. Its publishing run was 25,000-30,000 copies, which for those times was a great achievement.

In 1925 in connection with the jubilee anniversary of Voyennyy Vestnik it published a congratulatory article from the newspaper Pravda which pointed out that the journal had become a key factor of Soviet power in the matter of strongly organizing the Red Army... a source of the class formation of the commanders, and its printed organ which enjoyed merited affection.

Voyennyy Vestnik and the development of tactics in the 1920s and 1930s. After the victorious completion of the Civil War the Red Army was confronted with new tasks--guaranteeing the defense of frontiers of the world's first socialist state and the peaceful labor of the Soviet people against encroachments by the imperialists. The army had to be reorganized from a wartime to a peacetime footing, its personnel had to be cut back, quartered, and military and political training in it had to be organized in such a manner that the units and combined units were in a state of constant combat readiness. The party and the people did not forget the instructions of V. I. Lenin that: "...having started our peaceful construction, we will do everything possible to continue it without interruption. At the same time, comrades, be on guard, and protect the military capability of our nation and our Red Army like the apple of your eye..." (Complete Collected Works, Vol 44, p 300).

Subjected to review were the principles of the organizational development of the armed forces, their training and equipment. Their strategy and tactics were evolved considering the experience of combat, new tasks, organization and weapons. All these measures, carried out by the party and the government, went down in history as military reform. Voyennyy Vestnik organized an extensive discussion of these questions and thereby helped to resolve them.

The subject matter published in the journal was significantly broadened, and it was reorganized as the weekly military political journal of the

Red Army. Starting in April 1924 the editorial staff was headed by M. V. Frunze. In Voyennyy Vestnik he published a series of military theoretical articles which later became a part of his collective works. In particular, there were published: "The Current Tasks of Military Organizational Development," and "The 'Front' and 'Rear' in a Future War." At the same time K. Ye. Voroshilov began to take an active part in the work of the journal, becoming a member of the editorial board in 1925. Also collaborating actively with the journal were S. M. Budennyy, V. A. Antonov-Ovseyenko, S. S. Kamenev, B. M. Shaposhnikov, M. N. Tukhachevskiy, A. I. Yegorov, D. M. Karbyshev, Ya. F. Fabritsius, P. Ye. Dybenko, A. I. Sedyakin, and other prominent military leaders.

The journal published such important articles as: "In the Search for a New Military System," "The Reorganization of the Army," "The Personnel Training in Militia Units," "On the Militia System," "On the Territorially-Staffed Units," "On One-Man Leadership," "Scientific Organization of Labor in Military Affairs," "On Improving Group Tactics," "Changes in the Tactics of Field Artillery," "The Revolution in Military Affairs," "Forward Battalions," "The Coordination of Aviation With Ground Troops," "On Tank Tactics," "On a Meeting Engagement," and others.

Tactics developed most in the 1930s when, on the basis of a sharp rise in the industrial might of the nation, it became possible to carry out the technical restructuring of the Red Army, to create new types of weapons and combat equipment, and to improve the organization of the units and combined units. New tactical problems were also resolved in accord with this. The combat of the units and combined units of the land forces was viewed as combined arms combat. The development of the combat arms and military equipment raised the importance of coordinated actions. The increased firepower and strike force of the units and combined units as well as their mechanization and motorization made it possible to propose a new theory of offensive action, the theory of combat in depth. The war of the future was described as the war of motors.

The theory of the battle and operation in depth became the basic content of tactics and operational art. By combat in depth one understood combat involving the mass use of the most modern mobile weapons (aviation, tanks, airborne landings, motorized infantry, self-propelled and motorized artillery) for the purpose of the simultaneous cracking and neutralizing of the enemy defense to its entire depth with the subsequent development of the tactical success into an operational success by using the break-through development echelons. Combat in accord with these views was carried out on the basis of the coordinated actions of the combat arms, and on the operational level--by the branches of armed forces also. Here we should particularly mention the views which initially appeared at that time concerning the use of the cavalry and tank combined units for

independent combat actions in the operational depth of the enemy. This innovative and advanced scientific theory of Soviet military art left far behind the "science" of bourgeois military specialists who floundered around the theory of "gnawing through the defenses," or the so-called Douet and Fuller doctrines, the unsoundness of which was shown even before the start of World War II.

The new theory once again showed the superiority of Soviet military art over that of the bourgeois as well as its revolutionary scientific innovativeness on the basis of Marxist-Leninist methodology. A significant contribution to the elaboration of this theory was made by the prominent Soviet military theoreticians and leaders M. N. Tukhachevskiy, V. K. Triandafillov, K. B. Kalinovskiy, I. A. Khalepskiy, S. N. Krasil'nikov, and others, as well as by the collectives of the Frunze and the Armored Forces academies.

The major troop exercises held in the military districts in 1935-1936, and particularly in the Moscow, Belorussian, and Kiev districts, substantiated the correctness of the principles of the battle and operation in depth and contributed to the elaboration of unified views among the commanders as well as to their introduction into troop combat training practice. In 1936 they were officially formulated in Polevoy Ustav (Field Regulations) (PU-36).

The pages of Voyennyy Vestnik during those years were full of impassioned searches, discussions and debates contributing to the development and scientific recognition of this new theory which raised the tactics and operational art of the Soviet Army to a high level. During those years actively participating in the journal were M. N. Tukhachevskiy, A. M. Vasilevskiy, A. S. Bubnov, N. G. Korsun, A. I. Sedyakin, S. N. Krasil'nikov, G. F. Morozov, B. K. Kolchigin, Ye. A. Razin, V. D. Grendal', I. V. Tyulenev, A. A. Ignat'yev, P. P. Vechnyy, and many others.

The views about defenses also significantly changed. The defensive depth was increased at all echelons and demands were raised for creating strong antitank fire and obstacles. Prior to the preparatory artillery firing of the enemy it was recommended that counterpreparatory firing be carried out using artillery and aviation for this for the purpose of maximum neutralization of the enemy during the period that he was occupying the initial position for the offensive.

In the 1930s the international situation began to deteriorate. In 1939 imperialism and the fascism which it spawned unleashed World War II.

The Communist Party and the Soviet Government made every effort to prevent the Soviet Union from being drawn into the war and at the same time carried out important measures to strengthen its defense capabilities. Our army

was rearmed on the basis of the industrialization of the nation and the collectivization of agriculture. Life posed new tasks in the area of the art of warfare and in tactics as a component part thereof.

Voyennyy Vestnik broadly discussed the most important questions of combat theory considering the requirements of a modern war, the organization of the troops and their equipment. Conclusions were drawn from the experience of the battles at Khasan and Khalkhin-Gol as well as in Finland. Materials were published which helped the commanders of the subunits, units and combined units to indoctrinate the personnel in a spirit of love for the socialist motherland and burning hate for imperialism, to strengthen military order and discipline, and to prepare the troops for the approaching battles. Here is a brief list of the titles of articles from the prewar years: "The Character of a Future War," "Bourgeois Armies Are Being Reorganized for a New Imperialist War," "The Seizure of Austria by Germany," "The Destruction of Poland as a Prerequisite for a Breakthrough by the German Motorized and Armored Forces in the West," "Mobile Defenses According to German Views," "The Oath of Loyalty to the Motherland," "Universal Military Service," "Party Political Work in the Camps," "The Use of Combat Resources in a Battle in Depth," "Single Combat Against Tanks," "Periods of Offensive Combat," "The Use of Second Echelo nd Assault Groups on the Defensive," "Counterpreparatory Firing and a Tank Strike Ahead of the Front Line of Defense," "Tank and Airborne Assaults," "The Evolution in the System of Defense," "Protection Against Chemical Agents in Combat," "An Offensive on a Fortified Area," "Forward Detachments on an Offensive," and others.

Before the start of the Great Patriotic War Voyennyy Vestnik covered the combat experience of our troops in the Arctic during the winter, analyzed positive experience, and brought out the shortcomings in the field training of the troops and the factors causing them. Wherever possible the course of World War II, which was already raging, was analyzed. Some data were also published on the organization and weapons of the German fascist troops.

Voyennyy Vestnik during the years of the Great Patriotic War. With the start of the Great Patriotic War the journal was confronted with new difficult tasks. These included: to conduct active propaganda of party policy, to inculcate in military personnel a hate for the Nazi invaders, to instill in them faith in the rightness and ultimate victory of our sacred cause; for the purposes of improving combat skills, to elucidate the practices of conducting combat actions, to generalize and disseminate the best combat experience acquired on the battlefield, and to contribute to elaborating the most successful procedures and methods for fighting the Fascists.

The tactics of the Soviet Army were improved in the course of the war. The subject matter of the journal at that time accurately reflected their evolution. The initial period of the war was characterized by taxing defensive battles and the combating of enemy tanks with an acute lack of tanks and artillery. And Voyennyy Vestnik, on the basis of studying this experience, related to the readers how defense against superior enemy forces must be organized and conducted, how to destroy the enemy tanks with all forces and means and to fight against penetrating enemy groups and his airborne landings, how to secure the areas between troop groupings and the flanks, how to fight in an encirclement and to break out of it. At that time a great deal of attention was devoted to the combat employment of new weapons: automatic weapons, antitank rifles, incendiary mixtures, and so forth. The publication of such materials helped in the accumulation of combat experience, in the development of the tactical skills of the officers, sergeants and soldiers, and in indoctrinating them with a burning hatred of the enemy as well as a will for victory.

When the Soviet Army assumed the offensive, the most important articles were: "The Penetration of a Deeply-Echeloned Enemy Defense," "Reconnaissance in Force," "Assault Detachments and Groups," "The Penetration Attack in Breaking Through a Prepared Defense," "The Artillery Offensive," "The Actions of Mobile Groups," and "Pursuit of the Enemy, Encirclement and Destruction of His Isolated Groupings."

In the journal an important place was given to operational and tactical materials analyzing the outstanding victories of the Soviet Army at Moscow, Stalingrad, in the Northern Caucasus, at the Kursk Salient, in the Ukraine, in Belorussia, and so forth.

The editors and the editorial staff carried out extensive work on disseminating the experience of crossing major water obstacles such as the Dnepr, Western Dvina, Neman, Vistula, Danube, and Oder. The journal published articles on the actions of troops in mountains, in the Arctic, in forested-swampy terrain, in winter, in the muddy season, at night, and under other special conditions.

At the end of the war, before the drive on the citadel of fascism, Berlin, the journal devoted a great deal of attention to the actions of assault groups in attacking fortified buildings, in securing the flanks, and in rapid pursuit of the enemy.

Some materials of a research character were also published: "Conclusions From the Experience of Troop Control in an Offensive," "The Change in the Form of Battle Formations in the Patriotic War," "What Should the Artillery Be in a Rifle Regiment," "Some Questions on Piercing a Defense," and "The Evolution of Small Arms."

This was the start to a serious and profound study and generalization of the experience of the battles in the Great Patriotic War. The authors of these articles were generals and officers who were frontline heroes.

Voyennyy Vestnik in the postwar period. In the Order of the People's Commissar of Defense of 5 March 1945 the main task assigned to the journal was to analyze, on the basis of the experience of the Great Patriotic War, the theory and practice of modern combat, the coordinated actions of the combat arms, tactical and firing training and questions of military indoctrination, and to familiarize personnel with the organization, tactics, equipment and combat experience of foreign armies.

Basically the efforts of the journal were concentrated on a theoretical analysis of the tactics of the Soviet Army during the Great Patriotic War and the elaboration of recommendations for organizing training as well as for preparing combat regulations and programs for the combat training of troops.

From the middle of the 1950s tactical questions were already being reexamined under the conditions of the fundamental change in the character of modern warfare due to the appearance of nuclear missiles and other modern weapons.

In 1956-1957 discussions were carried out on the tactical questions of moment at that time, for example, on organizing and conducting an offensive from remote regions, on the combat and pre-combat procedures of subunits, and on the work of the commander in organizing combat and controlling the troops under the conditions of the employment of nuclear weapons. There was an extensive analysis of the combat actions of tank and motorized rifle subunits in an offensive, in a meeting engagement and on the defensive, in reconnaissance and security. Their coordination with the subunits of other troops was also examined. The discussions helped to establish a unity of views among the officers on many problems of the tactics of combined arms battle.

The resolution of these questions was greatly aided by the decree of the Secretariat of the CPSU Central Committee in 1960 concerning the merger of the military journals: Voyennyy Vestnik, Tankist (Tankman), Artilleriyskiy Zhurnal (Artillery Journal), Voyennyy Svyazist (The Signalman), and Voyenno-Inzhenernyy Zhurnal (Military Engineering Journal). These were combined into one journal, Voyennyy Vestnik--an organ of the USSR Ministry of Defense and intended for officers and generals in all specialties of the land forces. Thus, Voyennyy Vestnik became, in the full sense of the word, a combined arms organ. Its tasks and subject matter were significantly broadened and the demands on it increased. New permanent rubrics appeared in the journal such as: "Missiles, Artillery, and Air Defense Troops" and "Special Forces." The analysis of questions on the

tactics of combined arms combat and the elaboration of recommendations on the employment in it of subunits of all the combat arms and special troops remained the most important task.

Voyennyy Vestnik systematically publishes materials analyzing and developing the provisions of the regulations, articles on the most effective forms of commander training and military-scientific work, as well as consultations and replies to readers' questions. The materials, devoted to the urgent problems of organizing and conducting combat, are both creative and provocative. In the course of exchanging opinions this makes it possible to bring out more fully the role and place of all the combat arms and the coordination between them in combined arms combat, to find methods for rationally using equipment and weapons, and to open the path for everything new and advanced. All of this to one degree or another meets the needs of developing military science and the practice of combat training.

Experienced military leaders and military scientists are writing scientific research articles in which are examined the tactics of the Red Army in the Civil War and in the 1920s and 1930s; the tactics of the Soviet Army in the Great Patriotic War and the postwar period; the origin and development of the tactics of the Soviet tank troops; the revolution in military affairs and the tactics of subunits; political and military vigilance; the art of conducting combat; high rates of advance as an indispensable condition for victory; the combining of fire and maneuver as the basis for success in combat. We should also note such materials published in the journal as "Tactics and Mathematics," "Research Operations Methods in Military Affairs," "Mathematical Models of Combat," and "Network Planning in a Battalion." Great attention is devoted to the questions of control and communications, to developing new radioelectronic equipment, and to working out methods for combating radio interference.

In recent years in the journal there have been interesting discussions on the creative application of the provisions of regulations in combat, the tactics of subunits in modern combat, the mobility of engineer subunits, and the reduction of the time required for artillery and antiaircraft weapons to prepare for firing.

The circle of authors has also been enlarged. Frequent contributors of articles are: A. A. Grechko, Kh. M. Ambaryan, A. Kh. Babadzhanyan, I. Kh. Bagramyan, P. I. Batov, S. P. Vasyagin, I. S. Glebov, F. I. Golikov, D. A. Dragunskiy, A. S. Zhadov, M. V. Zakharov, V. I. Kazakov, K. P. Kazakov, P. A. Kurochkin, P. N. Lashchenko, D. D. Lelyushenko, A. I. Leonov, A. O. Losik, N. G. Lyashchenko, V. F. Margelov, K. S. Moskalenko, M. T. Nikitin, I. G. Pavlovskiy, G. Ye. Peredel'skiy, P. P. Poluboyarov, A. I. Proshlyakov, P. A. Rotmistrov, I. V. Tyulenev, V. K. Kharchenko, V. I. Chuykov, and others.

Other frequent contributors to the journal include: V. P. Averin, I. M. Afanasov, M. G. Vaynrub, S. V. Vasil'yev, Yu. M. Vaulin, S. S. Veshchunov, N. K. Glazunov, V. Ya. Grankin, P. D. Gudz', V. I. Davidenko, N. I. Yezhov, A. Z. Yekimovskiy, S. K. Kondratenko, F. A. Konkin, V. I. Kornev, P. N. Kudinov, V. I. Makarevskiy, S. M. Malyugin, D. T. Miloserdov, V. F. Mozolev, M. F. Nazarov, V. M. Sayko, Ya. P. Samoylenko, I. F. Sokolov, A. P. Timoshenko, L. I. Tsarikov, Ye. P. Sherstobitov, N. F. Shibayev, G. M. Shinkarev, and N. K. Shishkin.

The significant qualitative changes caused by the military and technical revolution have confronted military theory and practice with new tasks and have required further elaboration of the principles of the art of warfare, including tactical. The research by authors in the area of tactics has assumed a profoundly scientific character. Their inquiring minds again and again have turned to the rich treasure house of Lenin's military theoretical heritage. In numerous articles, particularly during the years of celebrating the 50th anniversary of the Great October Socialist Revolution and the USSR Armed Forces, during the year of the Lenin jubilee and the 25th anniversary of the victorious end of the Great Patriotic War, emphasis was placed on the new features introduced by V. I. Lenin and Marxist doctrine concerning war and the army, on the activities of Vladimir Il'ich in the area of directing the armed struggle of the Soviet people during the years of the Civil War, and on the leading role of the Communist Party in creating and strengthening the Soviet Armed Forces and in defeating the German fascist hordes during the Great Patriotic War.

In relying on Lenin's military theory heritage and upon the decisions of the party and the government, and proceeding from the requirements of tactics in modern combat, the journal is accomplishing its main task of providing help to the unit and subunit commanders in organizing the combat training of the troops, increasing combat readiness, and strengthening discipline and order.

Here the primary place is being given to materials on propagandizing the decisions of the party and the government and to articles which show the increasing leadership role of the Communist Party in military organizational development as well as in all other areas of organization, and in the struggle for the defense of the achievements of Great October, for building communism in our nation, for revealing the historic liberation mission of the Soviet Army, the principles of proletarian internationalism and the ways for strengthening the military cooperation of the armies of Warsaw Pact countries.

From party positions the journal publishes articles aimed at unmasking the military ideology of imperialism, as well as the attempts of its apologists to distort the Marxist-Leninist teachings about war and the army, to

falsify the history of World War II, and to belittle the role in it of the Soviet Union and its Armed Forces.

Voyennyy Vestnik is devoting a great deal of attention to studying, generalizing and propagandizing the advanced experience of training and indoctrination. These materials are being published particularly extensively in recent years. The value of such articles is increasing due to the fact that they show not only the high results of training, but also the ways for achieving these results.

It is not enough to study one's own tactics and military equipment in order to thoroughly prepare the troops, staffs and commanders for modern war. It is equally important to know the probable enemy. The journal helps the readers in this area. It has a permanent section entitled "In Foreign Armies," where materials are presented concerning the organization, tactics and weapons of the armies of the main capitalist countries.

* * *

The Soviet people, loyal to the ideals of communism and loving their motherland, will carry out the party directives and will fulfill and overfulfill the plans of the Ninth Five-Year Plan, as they have fulfilled and overfulfilled the plans of all the preceding five-year plans. This has become a very valuable tradition for the builders of communism. Even our enemies are convinced of this. The Soviet Armed Forces will receive even more advanced weapons.

In order for the troops to quickly assimilate the latest weapons and military equipment and learn how to use them in modern combat with the greatest effectiveness, it is essential to work out the appropriate tactical methods and to organize combat training efficiently. Here the military press, including the combined arms journal Voyennyy Vestnik, an organ of the Ministry of Defense, must provide great help.

Voyennyy Vestnik is celebrating its 50th anniversary in significant days when the Soviet people, with the greatest enthusiasm, have started to implement the magnificant program outlined by the 24th CPSU Congress for further advancing our nation along the path to communism.

At present the military press has no other more important or honorable task than that of disseminating the ideas and decisions of the 24th CPSU Congress to the masses of soldiers, to explain to them the greatness of the new five-year plan, and to inspire and mobilize them to carry out in an exemplary manner the responsible tasks assigned by the party to the Armed Forces.

# THE OBJECTIVE LAWS OF WAR AND THEIR REFLECTION IN SOVIET MILITARY SCIENCE

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Examination of the circumstances and factors producing victories and defeats constitutes one of the most important tasks of Soviet military science. Accomplishment of this task is based on a thorough knowledge of the laws of war.

Since the war Soviet military science, supported by Marxist-Leninist methodology and synthesizing the experience of the past war and qualitative transformations in military affairs, has added to its arsenal new data on the objective laws of war. Greater attention began to be focused on an analysis of the mechanism of their effect and utilization. Nevertheless the problem of the objective laws of war and their reflection in military science requires further elaboration.

In the first place, this is of great theoretical importance, since we are dealing with the question of philosophy, general view on war; two opposing points of view exist and are competing on the basis of philosophy. One view, characteristic of bourgeois ideologues and proceeding from an idealist philosophy, considers war as a chaotic jumble of random events, in which it is allegedly impossible to discover any regular patterns or laws. The other, materialist view, considers war as a social phenomenon, possessing a material basis. The difference in views on this fundamental question results in differing and sometimes opposite solution to other important problems of military theory as well.

In the second place, knowledge of the laws of war is also important from a practical standpoint. Laws constitute the basis of purposeful human activity. Purposeful activity in the military is possible precisely because man is capable of ascertaining objective trends in the development of military affairs and military events, and on the basis of an understanding of these trends is capable of stating realistic objectives and achieving these objectives. Without this, the sole basis of all military activity would be an empty hope for a chance congruence of many circumstances.

In the third place, also essential is further refinement of a number of concrete elements on which we have not yet reached a full consensus of views.

Much has been written in recent years on the laws of war. The most important studies have been written by G. A. Fedorov, M. V. Popov, P. I. Trifonenkov, I. A. Grudinin and others. They all acknowledge the objective

character of the laws of war and their significance for practical activity. A certain unanimity has been reached in interpretation of the correlation between the laws of war and the principles of military organizational development and the art of warfare, as well as links between the laws of war and military science. All authors attach great significance to the law of the dependence of the organization of armies, their strategy and tactics (and consequently victory and defeat) on economic conditions, on quantity and quality of arms and manpower.[1]

Investigators have accomplished a substantial amount. But, as is well known, in the course of solving one problem others arise. A deeper study of the laws of war has also engendered many questions on which various opinions have been expressed.

There also exist aspects of this problem which are almost ignored in published studies or which have only recently been stated. They include in particular the question of the laws of functioning and laws of development as applied to war.

The authors of this article, basing their discussion on available literature and as a whole on recent results of scientific research, shall present their view on the laws of military science.

Initial Methodological Premises

Initial methodological premises for solving this problem are the Marxian theses on the laws governing societal affairs and their relationship to human activity, as well as on the essence and content of war.

The laws of societal affairs comprise substantial, essential, repeating links and relations between various aspects and elements of societal affairs which determine its functioning and development. Social laws, in contrast to some laws of nature, are of the character of tendencies, that is they are manifested as a specific tendency of processes, which is in many cases not precisely traced in each individual phenomenon. This also applies to the laws of war.

Just as the law of value operating in the area of goods production by no means signifies that each and every article is sold only on the basis of its value, the action of a given law of war is manifested as a tendency. The outcome of a war is determined in the final analysis by the balance of military power of the belligerents involved, but this does not exclude the possibility of defeat of the stronger belligerent in individual battles and engagements.

The laws of war are of an objective character in the sense that their origination and effect do not depend on the will and desire of men. If a war is taking place, nobody is capable of excluding or eliminating the laws inherent in it. The objectivity of the laws of war, however, does not mean that they are divorced from human activity. Practical military activity creates the conditions for the laws of war to operate. And human activity is directly determined by men's consciousness, which in turn is determined by the objective world. Consequently, the subjective factor also functions as one of the conditions for manifestation of the objective laws of war. In addition, since the morale of troops and the volition and knowledge of command personnel comprise one of the factors of war (an important aspect), objective laws can operate as relations not only between the material factors of war but also between the spiritual forces operating in it.

It is precisely the connection between the laws of war and practical activity which makes it possible to utilize these laws. For example, during the course of warfare troops, guided by the volition of their commanders, purposefully alter in quantitative and qualitative relations various elements of the combat situation, as a result of which the regular links between them (not altering their nature) prove to be in a different relationship to the aims of the belligerents.

Thus the essence of utilization of the objective laws of war consists in directed influence on the situation, in order for the manifestation of laws to correspond to the stated objectives. One must bear in mind thereby that this task is being pursued by both belligerents, even if the corresponding political and military leaders possess only an empirical understanding of the laws involved.

Laws are in effect independently of human volition, but each adversary endeavors to alter the situation in such a manner that the objective tendencies promote the attainment of his own aims. Success in implementing this task will be achieved by that belligerent whose goals correspond to the greatest degree not only to his interests but also to the actual situation and whose actions more comprehensively take into account the objective laws of war.

A correct, scientifically substantiated determination of war aims and selection of the most intelligent actions, capable of producing success, are directly connected with that military theory which constitutes objective truth and therefore assists the military leaders in selecting the correct path. Soviet military cadres, relying on scientific dialectical materialist methodology, are working on the development of such objectively genuine military theory. Soviet military science as a theory reflects the objective linkages of war and provides an ideal, mental picture of reality.

The basic forms of scientific representation of life are the categories and laws of science and the principles of practical activity. In conformity with this, Soviet military science, from the standpoint of logical structure, encompasses empirical material, a system of categories (fundamental, most general concepts), a system of scientific laws and a system of principles of military leadership, military organizational development and the art of war, as well as theories and hypotheses. All these are logical devices of science.

There exists a definite interrelationship between the categories, laws and principles of military science; it is not random or arbitrary, but is based on their interdependence, community and difference of functions. The laws of military science play the most important role in the system of logical means, since they reflect the most important elements in the phenomena and processes of war.

The description of the laws of war given by Marx, Engels, and Lenin apply in full measure to the laws of military science. Criticizing Struve for his erroneous, distorted interpretation of the nature of the laws of science, Lenin explained: "...We shall remind him that all the other laws of capitalism discovered by Marx also represent in precisely the same manner only the ideal of capitalism but by no means its reality. "Our aim," wrote Marx, "is to present the internal organization of the capitalist mode of production only in its so to speak ideally average type"... The theory of capital assumes that the worker receives the full value of his labor. This is the ideal of capitalism but is far from its realities. The theory of land rent assumes that the entire agricultural population has been split completely into landowners, capitalists and hired workers. This is the ideal of capitalism but by no means its reality. The theory of sales presumes a proportional distribution of production. This is the ideal of capitalism but is far from its realities" (Poln. Sobr. Soch. [Complete Works], Volume 4, page 80).

It follows from the above that in the first place the laws of science, including military science, reflect reality in a generalized form, ideally, abstracted from particularities, and d o not simply describe experimental or observational data. Each law reflects essential, internal relations of reality in their ideal, "pure" form and therefore should possess strict formulation. The more deeply and fully the essence of actual relations is revealed, the more rigorously a law should be formulated. Sometimes one observes a situation whereby laws reflect the same relations, and yet these laws are differently formulated. This means that there is some difference in the interpretation of such relations. For example, formulation of the law of dependence of armed combat, the nature of military operations, the methods and forms of their conduct on weapons and military equipment varies from one author to another, although they all have in mind the same

relations. Therefore the search for a more precise and rigorous formulation of the laws of military science is natural and is aimed at further development of scientific knowledge.

Secondly, there is also a difference in utilization of the terms "laws of war" and "laws of military science." The term "laws of war" refers to the existence of substantial, essential, internal linkages in this social phenomenon, that is it emphasizes the objective logic of war, its change and development in relation to specific real factors. The term "laws of military science" indicates that objective substantial links (laws of war) are reflected in scientific principles, which constitute an ideal reflection of the laws of war. The more precisely and deeply the laws of war proper and their effect are cognized, the more scientific military theory is. Lenin emphasized that "the concept of law is one of the levels of man's cognition of unity and linkage, the interdependence and integrity of the world process" (Poln. Sobr. Soch., Volume 29, page 135). In other words, t'.e laws of military science are stages in cognition of objective links and relations inherent in war, that is a specific logical construction reflecting reality. Thus the laws of military science constitute a subjective image of the objective laws of war, that is constituting a logical form of reflection of reality, they possess objective content. The laws of military science are laws of war cognized by man, expressed in logical form and contained within a system of military knowledge. This obviously explains the fact that in the literature there is frequently failure to make a distinction between the laws of war and the laws of military science. This is permissible, but under the condition that gnoseologic concepts are not equated with ontological.

The laws examined by military science are not isolated from one another but are in a certain manner interlinked and connected with other elements of theoretical knowledge -- concepts, principles, etc.

Under present-day conditions progress in the development of military science is expressed in particular in the fact that not only are formulations of individual laws being refined but a new, more profound concept of the system of laws is developing. The more sophisticated this concept, the more precise meaning is acquired by a given law of military science. In other words, each law of military science possesses a certain relative independence, while at the same time they are all organically linked to one another as aspects of a unified, normal process of war, interact with one another and therefore can be thoroughly comprehended only in a unity and interlinkage. The system of laws of military science is a theory which reveals more or less fully the content of the laws of war in their connection and interaction and provides them with a scientifically substantiated classification.

In recent years much has been done in elaboration of a system of laws of military science. Nevertheless this work is far from completion. If one considers the systems proposed by various authors, one can see a common trait: they essentially deal with laws of development. In systems of this kind laws act as the expression of substantial links, phenomena and processes of war, chiefly from the aspect of their transition from one state to another. At the same time classification systems do not at present adequately reflect substantial relations which determine the internal structure of the phenomena of war and military affairs (structural laws) and the laws of functioning of military processes, that is their occurrence at one qualitative level, without any appreciable change in their qualitative state.

And yet it is well known that investigators have proceeded from predominantly quantitative or qualitative description of laws to their classification on other bases. B. M. Kedrov, V. P. Rozhin, A. S. Mamzin, V. I. Sviderskiy, Ye. P. Nikitin and others have examined in detail the common and different between laws of functioning and laws of development.[2] The question of differentiating between causal, noncausal and certain other laws has also been brought up.

Some military investigators have also proceeded along this path in studying the laws of military science. Resolving philosophical problems of simulation in military theory and practice, A. P. Dmitriyev, for example, distinguishes causal, functional, and structural laws.[3] V. A. Bokarev analyzes fairly detailedly the interrelation between unambiguous and probability laws of warfare of varying degree of generality from the standpoint of the possibility of their logical-mathematical formalization.[4] I. A. Vazhentsev spoke on laws of development and functioning at a scientific conference dedicated to the 150th birthday of Karl Marx.[5] The authors of this study outlined in one article a system of laws of military science which include laws of varying degree of generality.[6]

In order for a system of laws of military science, expressed in particular in their classification, in elucidating their interlinks and interrelations, to be genuinely scientific, it must be an ideal expression of specific relations of modern warfare and objective in its content, reflecting as accurately and fully as possible the aggregate of substantial links and relations of war, encompassing all the most important, substantial links, relations, and tendencies of war. It should not be one-sided. The system of laws of military science should serve as the most important theoretical basis for development of a system of principles of military science, the art of war and military organizational development.

Objective Basis for Classification

In elaborating a system of laws of military science it is essential to proceed from the dialectical principle of comprehensive consideration of the most diversified links and relations, for war and any act of war are governed not only by laws of development, which have been studied most completely, but by structural-functional laws as well. Marx, Engels, and Lenin proceeded in this manner.

Describing a socioeconomic system from the standpoint of production relations, Lenin stressed that "each such system of production relations is, according to Marx's theory, a particular social organism, possessing particular laws of its origination, functioning and transition to a higher form, its transformation into another social organism" (Poln. Sobr. Soch., Vol. 1, page 429). Here Lenin is speaking of genetic laws, which control the origination of social systems, the laws of system functioning and development.

In conformity with this one can state that war also originates as a result of the effect of genetic (from the Latin word "genesis" -- birth, origin, source) laws and is controlled by laws of functioning and development. An objective basis for classification of the laws of military science is contained in the substantial difference of processes of origination, functioning and development.

Of fundamental importance for understanding the interrelationship of genetic, structural-functional laws and laws of development is a thesis by Friedrich Engels, discussed in detail in our military philosophical literature and which is of the nature of a scientific law. It states: "...The entire organization of armies and the method of warfare employed by them, as well as victories and defeats, are dependent on material, that is economic conditions: on manpower and on weapons, and consequently on the quality and quantity of the population and on technology" (K. Marks and F. Engel's: Soch. [Writings], Vol. 20, page 175). The links specified by Engels are causal, genetic, and at the same time reveal the direct factors of functioning and development of military affairs.

Genetic and structural-functional laws, just as the laws of development, are closely interlinked. The process of origination of wars and separate military phenomena cannot be divorced from their functioning (existence in a given capacity) and development (origination of new properties and transition to new qualitative states). The law of the determining role of men and arms in relation to methods of waging war is both genetic (since it determines the origination of new methods of waging war) and structural-functional (it determines the retention and employment of existing methods), as well as a law of development (its effect determines

transition from old to qualitatively new methods). By the nature of their effect genetic laws are close to laws of development, since both cause the origination of qualitatively new phenomena or new degrees within phenomena. Their interrelation, however, does not exclude the existence of particular laws of a genetic and structural-functional type and particular laws of development in war and military

The effect of genetic laws determines the genesis of war as a socio-political phenomenon. In this case these laws control the transition of society from one state, that of peace, to another, that of war, characteristic of which is the employment of violent means, armed combat. They proceed from the antagonistic nature of society, based on private ownership and man's exploitation of man. Herein lies the meaning of the thesis that under present-day conditions imperialism is the source of aggressive wars. Consequently, the laws of the genesis of wars are contained in the economic and political relations of imperialism.

One of these laws states that the policies of the ruling monopolist bourgeoisie, constituting the concentrated expression of the bourgeoisie's selfish economic interests, engenders aggressive wars. The policies of imperialist powers constitute the main, immediate source of the danger of war in our time.

The laws of functioning, characterizing the internal substantial interaction between political and military objectives on the one hand and the means of achieving them on the other, the link between the elements of the military (combat) power of the belligerent nations both within each belligerent and between them, are in operation in war, in its individual phenomena and processes. These laws are a mandatory condition for preserving the integrity of the structure of separate military operations, their relative stability during continuous change. Therefore they can be called structural. In the literature laws of this type are also called structural-functional.

The action of these laws in the course of war is dictated in particular by the fact that both the military might of the belligerent nations and the combat strength of the engaging forces constitute a concentrated expression of the material and spiritual capabilities of society achieved during the course of its development. The sources and elements of the military might of the state and the combat strength of forces are interlinked in a specific manner, and this link is mobile and variable only within certain limits. It finds expression in particular in the law of dependence of a nation's military strength on its economic resources and potential, that is on its economic system and level of economic development. There exists a definite, substantial connection between economic capabilities and the requirements of war, between fire and movement, between operational

formation elements, etc. This connection cannot be random; it varies only within specific limits. For each concrete war, for each engagement and operation it is possible to find an optimal variant of this connection, ensuring the most expedient utilization of available manpower and resources. Going beyond the bounds of such an optimal variant can lead to a weakening of the country's military might and correspondingly of its combat strength, to disruption of links between elements of the combat formation and operational formation, and in the final analysis to a situation whereby the troops will be unable to carry out their functions successfully. Precisely for this reason each belligerent endeavors to disrupt the adversary's structural organization and preserve its own.

A number of laws which can be called laws of conformity are structural-functional laws.

The first is the law of conformity of actions of different forces in achieving the same objectives. It is usually called the law of interrelations or unity of military operations in time and space, in the attainment of military-political aims.[7] It expresses the substantial relations between services and arms, as well as individual troop organizations in the course of military operations on land, on the sea and in the air. These relations operate with the force of necessity to the extent that the military might of the opposing sides includes unequivalent elements interlinked in a specific manner. The difference in the nature (essence) of material and spiritual elements results in differing stability and strength. The effect of any factor on military might nonuniformly alters its elements, weakening some and strengthening others. Here too the law of conformity constitutes a regulator of troop activities.

Second is the law of conformity of military operations by levels: tactical-operational, operational-strategic, strategic-overall course of the war, material and spiritual potential of society. If there is no such conformity, lower-level military operations lose their meaning and have no chance of success.

Third, laws determining methods of conduct and effectiveness of combat operations of the belligerents. It has been theoretically substantiated and practically proven that methods of warfare depend to a decisive degree on quantity and quality of arms, combat equipment and personnel, and skill in troop control. This law is particularly vividly manifested today. Nuclear arms and development of sophisticated military equipment have required a reexamination of methods of conducting combat operations and have made the attainment of victory directly dependent on whether or not armed forces have at their disposal modern, particularly nuclear weapons, missiles, as well as on the character of employment of these weapons and the quantity of suitably-trained command and rank and file personnel, capable of quickly mastering and efficiently utilizing these means, skillfully finding and employing expedient forms of warfare.

As regards the laws which determine the effectiveness of troop operations on the battlefield, they essentially constitute objective relations the practical utilization of which creates the most favorable conditions for achieving victory. We feel that these laws should also be assigned to the structural-functional category. One of these can be formulated approximately as follows: effectiveness of troop combat activity depends on the conformity between methods employed on the one hand and stated aims (missions) and the prevailing situation on the other. This law becomes particularly important in modern war, in which rapid and frequently sudden situation changes will become the rule. In such complex conditions it will be particularly important to employ methods of troop operations which correspond to a maximum degree not only to changes which have already occurred but also to those which can be predicted. This also applies to determining forces, which contain the concentrated expression of their material and moral might, comprehensive training, the experience and skill of their military commanders.

Thus the specific features of the law of functioning consist in the fact that they regulate the course of war or its separate stages not directly but only in the degree to which they affect the elements of the might of the belligerents involved.

Qualitative change in combat operations and their development (favorable for one side and unfavorable for the other) takes place when the structure (system) of one of the sides is retained, while the structure of the other (under attack by the former) is substantially reorganized, disrupted, or collapses entirely. All this is determined by the laws of development. A feature of these laws and their distinction from structural-functional is the fact that they control a change in phenomena and processes which leads to transition from one qualitative state to another. As in other areas of activity, in the area of the military laws of development reflect "a specific sequence, rhythm, pace, etc in rearrangement of the material structures proper and relations between various states of system objects."[8]

The most characteristic law of this type is the law of development and change of methods of conducting military operations and waging war as a whole. It is in effect not only in wartime but in peacetime as well, controlling the development of military affairs, linking them with societal affairs. The law expresses the substantial, essential link between manpower and military hardware on the one hand and methods of conducting military operations on the other. The most mobile, rapidly-changing element in this system is military equipment and weapons.

The most general and important law of development is the law of the dependence of the course and outcome of war on the ratio of forces of the belligerents involved, examined on a dynamic basis, taking into consideration the nature of political aims. It is known that the ratio of

belligerent forces (quantitative and qualitative) is an objective foundation on the basis of which troops accomplish their assigned missions. A change in this foundation, a strengthening or weakening of the belligerents, leads to their success or failure.

The laws of development control the transition of military operations of one level to a qualitatively different level, from one scale to another, broader scale. Suffice it to say that development of tactical success into operational and operational into strategic does not take place whenever one would like, but only in the presence of specific conditions and with the action of specific factors. The law of development controls transition from the strategic level of military operations through the operational to the tactical level. The achievement of strategic results has a positive effect on troop actions at the operational level, and of operational results -- at the tactical.

These laws of development are characterized by an important feature: they do not control the processes of war independently of one another but operate only in a specified aggregate, in a specific combination. For example, the troop masses participate in operations of a strategic nature. Here there is a direct influence by economic and other potential inherent in the state as a whole. Actions of an operational nature are also linked with utilization of men and equipment, but on a smaller scale, and the result affects the achievement not of the major but only of particular, partial war aims, namely operational, which are substantially determined by such factors as the offensive strength and firepower of operational formations and tactical large units, their mobility, etc. Such elements as objective, fire, maneuver, etc interact in engagements of a tactical scale.

Interaction of the laws of war can be viewed on two levels. First of all, laws of a higher level, more general in the sphere of their action, interact with laws of a lower level, less general. This interaction, which expresses the subordination of laws of one level to laws of another, can be called "vertical" interaction. Second, laws are also "horizontally" linked. This link is expressed in strengthening of effect of certain laws and weakening of others, depending on specific conditions, the nature of the war, as well as the ability of the military leaders.

These are some of the structural-functional laws and laws of development studied by military science. They differ from one another, regulating various aspects of war, and at the same time act simultaneously, interweaving, determining the course of the war.

Basic Orders of Magnitude of Laws

Classification of the laws of war is not exhausted by specification of the above-stated types, differing chiefly in character of operation of the laws. In addition, the laws of war are also distinguished on the basis of degree of community: some pertain to war as an integral sociohistorical phenomenon and reveal its substantial links with the fundamental aspects of societal affairs; others pertain chiefly to military operations of a different scope and reveal the inner substantial links and relations of these processes. In conformity with this, it is expedient to group the laws of war into specific orders of magnitude, which make their classification fuller and more comprehensive.

The most general laws of war are laws of the first order. They comprise the general theoretical foundation of military science. Scientific investigation of war demands cognition not only of its inner links but also its regular relation to political, economic and other factors.

Laws of the second order include the law of dependence of war and its conduct on policy, which reveals the essence of war as a particular social phenomenon. Its action encompasses all processes of war and is manifested in the decisive influence of political aims on the fundamental aspects of war and military affairs, independent of scale or scope. Not a single act of war, not matter how large or small, is conceivable outside of politics, outside of political aims.

This law is organically linked with the law of the determining role of the correlation of belligerent forces during the course of a war. The latter is operating continuously, in the process of implementation of political aims by the state and class. It expresses such a substantial aspect of war and military operations as the existence of various capabilities and conditions for their realization by the belligerent sides. A favorable correlation of forces promotes transformation of potential into reality, whereby effectiveness of military and political leadership and conformity between political and military aims constitute a decisive factor.

Since the outcome of the war between nations (coalitions) depends on the correlation of their military strength and on the ability of the military and political leadership of each of the belligerents to establish superiority in this respect and to utilize this superiority, each military action (engagement, battle, operation) is predetermined by the same concrete conditions. In other words, the law of dependence of the course and outcome of war on the correlation of forces of the belligerents is in effect at all levels of war and at every scale of war.

But this law can also be viewed somewhat differently. Due to its generality it also includes a number of trends, relatively independent substantial relations which in our literature are called fundamental laws of the course and outcome of modern war.[9] And this is correct, for every general law can be manifested through other, more particular laws whenever they express the same substantial links and relations. This is inherent in the general law of correlation of forces as well as in individual, more particular trends expressing the dependence of military might proper, and the course and outcome of war on the correlation of morale-political, economic, and scientific-technological resources and potential of the belligerents. Each of these relations functions as a separate law, but a law which constitutes a part, an element of a more general law.

For example, A. Ye. Tatarchenko proposes that one consider the law of dependence of the course and outcome of military operations on the correlation of levels of leadership (that is levels of planning and control) as an independent part of the general law.[10] He emphasizes that the correlation of levels of leadership enters in latent form all relations involved in the group of laws under consideration. The present stage in the development of military affairs, where the task of raising the level of scientific leadership has been advanced to the forefront, where we have obtained enormous material making it possible to reveal the substantial and essential links and relations between troop control and the course of war, provides a basis for formulating this law.

We believe that Tatarchenko's proposal is quite correct. It reflects not only the requirements of military affairs but also the logic of its scientific cognition, and constitutes a new step on the road to deeper cognition of the nature of war and mastery of the mechanism of utilization of laws in the interest of victory over the enemy.

Summarizing what has been stated above on the general laws of war (laws of the first order), we arrive at the conclusion that they can be reduced to two fundamental laws. The first of these is the law of the determining role of politics in respect to war, and the second is the law of the determining role of the correlation of belligerent forces in regard to the course and outcome of war. Taken together, these laws encompass all fundamental aspects of war: its sociopolitical character, its course and outcome. Since the effect of these laws is closely interwoven (the political content of war exerts a specific influence on its course and on the correlation of forces, while the correlation of forces in turn influences the political content, the war aims), both these laws can be viewed as one more general law, encompassing the decisive relations of war.

Such a unification of two laws of science into one, more general law, not only does not contradict the logic of science but on the contrary in certain cases intensifies knowledge, since it makes it possible to reveal the

more general and more complex development trend and to see more clearly its deep link with the laws of development and functioning of those social systems which are waging the war. A comparison of these laws shows that the belligerent which conducted a war on a new social and economic basis and relied on general sociological laws as the general motivation for action on the part of large masses of individuals, classes, has proven to be historically victorious.

Analyzing wars of the period of replacement of feudalism with capitalism as a more progressive socioeconomic system, Marx and Engels emphasized that victory is usually on the side of the progressive forces, that in a clash between two social systems, with approximate equality of material resources, the advantage is possessed by that side which represents the more advanced social system, of course under the condition that this side's leaders pursue a correct policy and implement correct strategy (Marx's and Engel's, Soch., Vol. 15, pp 355, 360). This obviously also applies to our era, when the transition from capitalism to socialism is taking place.

Arguments about the unity of two laws of the first order lead to the problem of the fundamental law of military science (and of war). We should recall that this problem is not new. It is stated by life itself, by the logic of development of military historical and military science. Interest in this problem is confirmed by debates in the military press and among military theorists and practical workers.

The first major debate took place at the beginning of the fifties. It was dedicated to the nature of the laws of military science. Even then there was discovered a diametrically opposite approach to the problem of the fundamental law of military science. Some participants in the debate were against raising the very question of a fundamental law of war (military science), as they considered it to be contrived (M. Shvarev, V. Voronin, A. Balashov, A. Pshenichkin and others).[11] In spite of the difference of arguments, these authors are unanimous in one thing -- separation of specific laws from general, in placing them into opposition with one another, in absolutization of the general laws of societal development.

Many participants in the debate agreed with statements of the question but differed in their views on its content. A law of victory proposed by N. Talenskiy failed to receive support, since his formulation expressed rather the principle of military science.[12]

Several other formulations of a fundamental law were also rejected. For example, the opinion was expressed that each belligerent side possesses its own fundamental law of war, that belligerents waging correspondingly a just and unjust war cannot rely on a single fundamental law. It was asserted that Soviet military science possesses its own fundamental law,

while bourgeois military science possesses another (G. Chaylakhyan, K. Leshchinskiy, A. Maslov, M. Shvarev, etc).[13]

But it is a well known fact that war is a process which embraces both warring sides, not just one. That which some individuals propose be considered a fundamental law is nothing other than a description of a type of war.

Reduction of the fundamental law of war to a statement that "victory in modern war is gained by superiority in continuously-operating factors and their comprehensive and full utilization"[14] (M. Khorokhinov, M. Marinenko, M. Goreyev, V. Avramenko, etc) expresses the determining role of the major factors (but not all), but it takes them at a certain degree of divorcement from politics. Therefore such a formulation of the law essentially reflects only one substantial aspect of war but fails to take the other into consideration.

M. Otreshko has stated that the fundamental law of war must be sought in the essence of war, since it includes the aim, ways and means of achieving that aim.[15] While during the course of debate this opinion failed to receive substantial support, subsequently it has received warm response. G. A. Fedorov, M. V. Popov and several others have called the essence of war the fundamental law of war. War, wrote Fedorov, "constitutes a continuation of the politics of specific classes and nations by means of armed violence, the direction of which in the final analysis is determined by the economic structure of society. This is the fundamental law of the origination and course of every war "[16]

Popov formulates it somewhat differently: "The substantial relationship in war between politics and armed combat, consisting in the determining influence of politics on armed violence, constitutes the fundamental law of war."[17]

This formulation stresses the link between the fundamental law and the essence of war, the determining role of politics in war.

Nevertheless one cannot agree with this interpretation of the fundamental law of war. This viewpoint fails to take into consideration, in our opinion, the fact that the fundamental law of war should also constitute the fundamental law of military science, should comprise its central point, determining the character of military research. This formulation takes only one substantial aspect of war -- the predominant role of politics in relation to the process of employing violent means (armed forces), but it fails to deal with the fact that military power is determined not only by spiritual but both primarily and in the final analysis by material

resources. In spite of the great importance of the interrelation between war and politics, this link fails to answer the question: how is victory in war determined and how is it attained? It therefore cannot be the fundamental law of military science.

The fundamental law should also take into account the specific features of war as a sociohistorical phenomenon in which politics is continued by violent means on both sides. A certain absolutization of politics, an underestimation of the economic conditions of waging war and, as a result, divorcement of armed violence from other aspects of societal affairs permeates Popov's formulation of the fundamental law of war.

Emphasis of the preeminent role of politics fails to reveal the specific features of war. Politics always exerts the decisive influence; not a single process in the affairs of a class society takes place divorced from politics. The specific features of war as a political phenomenon consist in the fact that its dynamics are determined by the correlation of material and spiritual resources of the belligerents, expressed chiefly in the correlation of their military strength.

We believe that the problem of revealing the fundamental law of war (and of military science) can be solved. This proceeds in the first place from the nonequivalence of links and relations operating in war. Certain links and relations play a more important role, while others play a less important part; some are more substantial and essential than others; some are more general while others are less; some operate continuously, as long as a war is in progress, while others are temporary, transient; some are more active, and others less, etc. The fundamental law expresses the most substantial, essential links which are in active operation throughout the course of a war and which determine others (depending on conditions). Secondly, the possibility of revealing a fundamental law proceeds from the fact that scientific cognition precisely delineates the decisive, main, fundamental aspects of a war: its sociopolitical character and its course. It follows from this that the fundamental law of war should in one way or another encompass both these aspects, including the substantial links of a general description of war and its dynamics.

The fundamental law of military science should take into consideration the unity of structural-functional, genetic links in relations, of change and development, that is it should express the essence and content of war on a dynamic basis, the unity of the genetic and structural elements of war, embodying the general, specific, decisive and determining. This is a law of the functioning of the phenomena of war as well as their development in an organic unity of these elements.

From our standpoint the fundamental law of war (military science) is a law of the determining influence of the political content of war and the correlation of forces of the belligerents, taken in an inseparable unity, on the genesis of a war, on its character, course and outcome.

This formulation of a fundamental law expresses the idea of unity of all laws controlling war, determining the nature and essence of war, the determining causes and the dynamics of its fundamental processes. It stresses the fact that war is waged by belligerents for the sake of opposite aims, which are determined by the interests of classes and the prevailing correlation of forces. In other words, the fundamental law expresses the fact that war in its basic features is conditioned by two main factors: political (and military as well) aims pursued by the belligerents, and the correlation of their material and spiritual resources at each given moment. The existence of this interaction can be seen in an investigation of the course and outcome of a war, the features of military operations and methods of conducting them, etc.

Political aims per se (just as the correlation of forces per se) do not determine the character and course of a war: their manifestation is expressed in the actions of the masses, the troops, and the military-political leadership. The regular processes of war and the development of military affairs can be understood only if one takes into consideration the interaction of the above factors. Of course military-political aims and correlation of forces are not random at any given moment but are determined by specific objective circumstances: economic, moral, sociopolitical, scientific, military proper, as well as geographic, meteorological, and others in which the war is waged. Their dynamics characterizes an antagonistic process in which there occurs continuous competition to destroy the material and spiritual resources of the enemy and to preserve one's own. This process, directed by the military-political leadership of the belligerents, is of a genuinely dynamic character; it continuously changes in various areas and directions, both quantitatively and qualitatively. And all this is in the name of directly opposed political and military aims of the belligerents.

The fundamental law constitutes a most important element of the entire theoretical system of military science. The links and relations recorded in it occupy a special place; they as it were "control" other links and relations (laws). Other, more particular laws, principles and rules of military science can be derived from it; for example, those which express the interrelationship of military operations and armed combat with the economic, sociopolitical and spiritual affairs of society.

Directly linked with laws of the first order are laws of the second order, expressing the interrelation between internal factors of various scope and

nature. These are laws which are common to both belligerents and laws which reflect the specific features of the actions of each separately, conditioned by the nature of the social system. The number of these laws is differently specified by different authors.[18] In spite of this fact, they all reflect essentially the same substantial links and relations characterizing the various aspects of military operations. The difference is to a large degree expressed in noncoincident formulations, in degree of community and completeness of their reflection of objective reality.

Laws of the second order are essentially the laws of functioning and development examined at the beginning of this article, applied to the scale of conduct of military operations. They determine the course of military operations and express their relative independence, their spirit and nature in a unity of sociopolitical and military-technical aspects.

The following laws pertain to the second group of laws of military science: the law of the determining influence of military objectives on troop actions and their results at all levels; the law of the determining influence of the correlation of opposing forces on troop actions and their results; the law of the dependence of methods of conducting military operations and success of such operations on the quantity and quality of personnel, arms and skill in troop control; the law of correspondence between military operations between levels: tactical - operational, operational-strategic; the law of conformity of operations by various troops in achieving the same objectives (the law of interrelation and unity of military operations); the law of relationship between the effectiveness of troop combat activities and the correspondence between employed methods, stated objectives (missions) and the prevailing situation.

In addition to these laws, other laws are manifested in military operations, laws connected with the employment of various military equipment in performing combat missions. Laws of this type are studied by the various military technical branches of military science. They are entitled to relatively independent existence. This problem requires additional discussion.

Having in mind a system of laws of military science as a reflection of the objective links and relations of war, one can state that only in their unity do the laws of war determine its course and outcome. Each of them performs special, specific functions. At the same time the system of laws of military science reflects their interaction. Distinction of laws on the basis of the levels of their operation, the functions performed by them, etc makes it possible to understand more thoroughly the features of conduct of military operations, armed combat and war as a whole under various conditions and more effectively to accomplish the missions assigned the armed forces and military science.

Determination of the levels of war and the laws corresponding to them, including the fundamental law, provides a basis for establishing the uniqueness of links and relations manifested in various branches of military science. Each level of the laws of war occurs in the form of those substantial relations studied by military science and its branches.

The content of the laws of military science and their interrelations are such that they enable one to understand to what degree the political and military aims advanced by the belligerents correspond to their capabilities of waging war and gaining victory, and how they are combined with the fundamental sociopolitical tendency and trend of historical development. A system of laws makes it possible to see basic trends in the development of military affairs in relation to scientific and technological advances, the general correlation of social forces and other objective conditions. Knowledge of the laws in their system makes it possible correctly to determine and take into account the essential quantitative and qualitative characteristics of the material and moral resources of the belligerents and, what is most important, to predict the results of their conflict and the conditionality of its outcome.

FOOTNOTES

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# QUESTIONS ON THE METHODS OF ORGANIZING COMBAT OPERATIONS

Col V. Vinnikov

In studying the given problem, it is essential to point out that the commanders and the staffs really have additional opportunities for raising the effective organization of combat if they fully utilize for these purposes the time which they possess before obtaining the mission. But, unfortunately, this seemingly obvious idea has not always been properly reflected in the corresponding literature and in training practices.

In the command training of officers and in training students and officer candidates in the schools, the commander's organizational work, as a rule, is unknown to the trainees before receiving the mission. Ordinarily the officers begin the organization of combat with an explanation of the mission. Then the time is calculated, the procedure of the further work is determined, the primary measures for accelerating preparations for combat are designated, the preliminary orders are given, and reconnaissance is organized. Then the commanders evaluate the enemy, their own troops, the adjacent units and the other conditions, and make a decision. Then the missions are given to subordinates, with time available reconnaissance is carried out, the decision and mission are explained to the troops, coordinated actions are organized, as well as all-round support for troop combat.

We are deeply convinced that the organization of combat, that is, the carrying out of the complex of preparatory measures for combat, can and should, under modern conditions, be carried out to a certain degree prior to receiving a combat mission and, particularly, the next mission, when the commander and the staff, in the course of implementing a previously assigned mission, carry out a maximum of preliminary measures which subsequently insure successful fulfillment of both the expected mission as well as a suddenly arising new one, in the instances both of a mission set by a superior commander as well as one personally given by the commander in accord with the situation. Only with such an approach to solving the question can fuller consideration be given to such important demands upon organizing combat as: maintaining constant troop readiness for carrying out the next combat missions; insuring efficiency, effectiveness and concealment of combat preparations; achieving parallel action in organizing combat simultaneously on several command and staff levels, displaying foresight and greater responsibility by the officials for the performance of their functional duties.

This will make it possible to obtain more rational use of that small time budget which the commanders and staffs may have after obtaining the mission.

They will be free of much that they would have to do under the traditional methods in completing the organization of combat. One can easily see this having analyzed the work of a commander, for example, after making a decision and setting missions on a map. Later, if the situation allows, he reconnoiters the terrain and the enemy, and using terrain markers and the map, indicates his own mission as well as the mission of subordinate and supporting troops. Then he gives the orders and organizes coordinated actions, and in concluding the work gives orders for the all-round support of combat. These usually cover the questions of organization of reconnaissance, defense against weapons of mass destruction, political work; engineering, technical, material and medical support; security, camouflage, the preparation of the personnel, and so forth. The orders given at the end of organizing combat contain a number of general instructions which the subordinates should know before going on reconnaissance. As a result the superiors spend a great deal of the daylight hours on their work, while the subordinate commanders, particularly the subunit commanders, hurriedly organize combat on the terrain and, having returned to their subunits, are not able to carry out the received instructions completely. Moreover, many of the general instructions which are necessary and could have been given ahead of time, in the given instance lose their purpose and practical expediency.

Certain schools have attempted in some manner to accelerate the issuance of the necessary instructions. For example, it has been recommended that instructions be given ahead of time on replenishing stocks, on preparations for the evacuation of the wounded, for assigning a battalion to a forward detachment in anticipation of a meeting engagement, on the composition of reconnaissance elements, and so forth. But this is done only after explaining the mission, although careful analysis of such instructions indicates that they are based upon an assessment of one's own troops and the overall situation. To a significant degree this assessment can be made at an earlier time, even before receiving the next mission. Without waiting for it, the commander organizes aid for sick and wounded, the replenishment of the supplies of the subunits, the repair and servicing of equipment, and the preparation of the personnel for the forthcoming actions. At the same time, in addition to his own troops, to the degree possible he assesses the enemy, the terrain, weather conditions, and so forth. For example, prior to the last daily move toward the front, he endeavors in as great a detail as possible to learn the situation on the front and the possible character of changes in the situation. In the event of a breakthrough by the enemy and the occurrence of a meeting engagement, the commander, without yet having a specific mission, determines what subunit is to be in the forward detachment (the advance guard), takes measures to reinforce it with his own forces and means and orients its commander for the appropriate actions.

In the course of combat after carrying out a previously assigned mission, for example during pursuit, the commander carefully studies the situation in the direction (sector) and on the flanks of his own troops. If there is a water obstacle ahead, he, without waiting for instructions from above, at his own initiative, takes measures ahead of time to cross it. If fighting breaks out for an intermediate position, the commander intensifies reconnaissance, increases its efforts, carefully assesses the enemy in the course of the approach, and designates the best area for the breakthrough and the best grouping of his forces and means. Then he reports his decision to his superior. Consequently, the commander rather often on the basis of evaluating the situation makes an independent decision for routing the opposing enemy even before receiving a mission. Such decisions are particularly characteristic and essential for conditions of independent troop actions, for instances where contact is lost with a superior, or where his control points have been knocked out.

Thus, in modern combat, under the conditions of abrupt and frequent changes in the situation, with the great dynamicness of combat, the receiving (setting) of each next mission should be preceded by an all-round and thorough analysis of all components of the combat situation. Without this it is difficult to foresee its development, to anticipate the enemy in actions, and promptly to take enterprising and bold decisions. Obviously, it is useful to create a corresponding situation in exercises for training officers. Of course, with the receipt of the mission, the assessment of the situation continues, but now in a strictly defined area of the terrain and with greater purposefulness. Here the time for the given work is sharply reduced and the effectiveness of the actions undertaken by the commanders, staffs and troops significantly rises, since they start to carry out the mission under a situation which is familiar to them.

In other words, in order to raise the efficient organization of combat, there exists a definite opportunity and necessity for evaluating friendly troops and certain other known conditions of the situation prior to receiving the next combat mission. In training officers this can become the initial prerequisite and principle for organizing combat.

The evaluation of friendly troops, as happens in practice, should be continuous, anticipatory, and unified. The commander and the staff must constantly know the situation, the status, the fighting strength, the supply level and combat capabilities of each unit and subunit. The observance of these requirements makes it possible to forestall the enemy in actions and to reduce the time for preparing to carry out suddenly arising combat missions. The unity of evaluating friendly troops consists in the fact that it is made both for the purposes of rapidly making a sound decision under the sharply changing conditions of the situation as well as for constantly maintaining (raising) the combat capability of all

the forces and means, as without this the carrying out of any immediate tasks is inconceivable. Obviously, in following such demands, the commander, with the receipt of the mission, compares the combat capabilities of the sides significantly more rapidly and on the basis of this reaches certain conclusions. This is what actually happens in a combat situation. Consequently, it is essential to proceed from this in training the officers to organize combat actions. This principle should, obviously, be reflected in the appropriate documents where it could be stated that the organization of combat actions very often will commence before obtaining a combat mission on the basis of analyzing the data of the situation and anticipating its development.

A constant knowledge of the situation, as well as the state of supply and fighting strength of friendly troops, together with continuous analysis of all other conditions of the situation, even before receiving the mission, lie at the basis of the proposed method, if it can be so said, of the stage-by-stage organization of combat. For the purposes of achieving the prompt preparation of the troops to carry out the next combat mission, on the basis of analyzing the data of the situation and anticipating its development, the work of the commander and the staff in organizing combat operations is carried out in two stages: the first is before receiving the next combat mission (or before its independent definition), and the second is after receiving it (or after its independent definition). The preparation to carry out the next mission often coincides in time with the conducting of combat actions. However, for the purposes of a more complete and thorough elucidation of the process of organizing combat, such a stage-by-stage examination of it in training practices, in our view, is beneficial.

We would like to show the effectiveness of the proposed method from the example of organizing an offensive while moving from an assembly area. In this instance, as is known, the commanders and the staffs, even before the troops reach the designated areas, are informed of the possible direction of the forthcoming actions.

In the first stage (before receiving the mission), the commander assesses friendly troops and takes measures to raise their combat capability; he analyzes the overall situation including: the character of actions facing his own troops and those of the enemy, his distance and the possibilities for exerting influence on subordinate troops; he determines the possible development of events and actions by the sides; he evaluates the weather and climatic conditions, the terrain, the radiological, chemical, and bacteriological situation in the directions of the forthcoming actions, the adjacent units (their position, combat capability, and possible place in the battle formation of his own troops); he also determines the approximate time for the expected start of operations as well as the time required for organizing the battle on the terrain.

Foreseeing the further development of events, the commander can tentatively ascertain which subunits it would be beneficial to have on the axis of concentration of the main efforts and on the secondary axis, in the assault or second echelon (reserve), their place in the assault echelon, and so forth. He does this on the basis of analyzing the combat strength of the troops, the combat capability and combat morale qualities of the personnel. These, as is known, are not determined by the presence or absence of a combat mission. Accordingly, a sound plan for allocating reinforcements can be set. Certainly, with the obtaining of the mission, these conclusions will be adjusted on the basis of assessing the specific enemy, the missions of the adjacent units as well as clarification of the intentions of the superior commander.

It must be pointed out that many commanders not only before receiving the mission but even before setting out for training exercises outline to themselves what subunits should be used for reconnaissance, in the forward detachment, the advance guard, the point, on the most important axes, for eliminating the consequences of the use of weapons of mass destruction, for organizing traffic control service, and so forth. And this is completely natural as the commanders know the training level of each subunit as well as the organizational capabilities of the officers leading them.

On the basis of the work done prior to receiving the next mission the commander gives the necessary orders. In them he determines the maximum possible measures for preparing and supporting combat operations which should and can be carried out without waiting for the receipt of the mission.

Can much be done here? Yes, it can.

For example, in the area of reconnaissance -- to clarify the procedure for obtaining reconnaissance data from the superior and adjacent units, to send out (when the situation allows) officers to the staffs ahead of the operating units, to determine the possible number and composition of reconnaissance elements (organic and from the combined arms subunits), to take measures for forming them and reinforcing them using the reconnaissance forces and means from the subunits of the combat arms and special troops, and to establish the time period for their readiness and the possible methods of operations. It is also possible to project the characteristic reconnaissance missions both on the basis of available information on the terrain and the enemy as well considering his organization and tactics, to anticipate how reconnaissance efforts can be increased during the course of combat, from what subunits a reserve of forces and means can be created, and to determine the procedure for communications and the submission of reports.

In the area of protection against weapons of mass destruction -- to indicate (specify) the procedure for providing the subordinate troops with protective, detection and special decontamination equipment, the organization of observation and warning, and the implementation (when necessary) of preventive measures and actions on contaminated terrain; to determine the forces and means for eliminating the consequences of the use of weapons of mass destruction and the amount of engineering preparation in the occupied areas and positions; to give general instructions on the use of camouflage and protective properties of the terrain in the occupied area and during movement; to establish the procedure for dosimetric control and the priority of reports, and so forth.

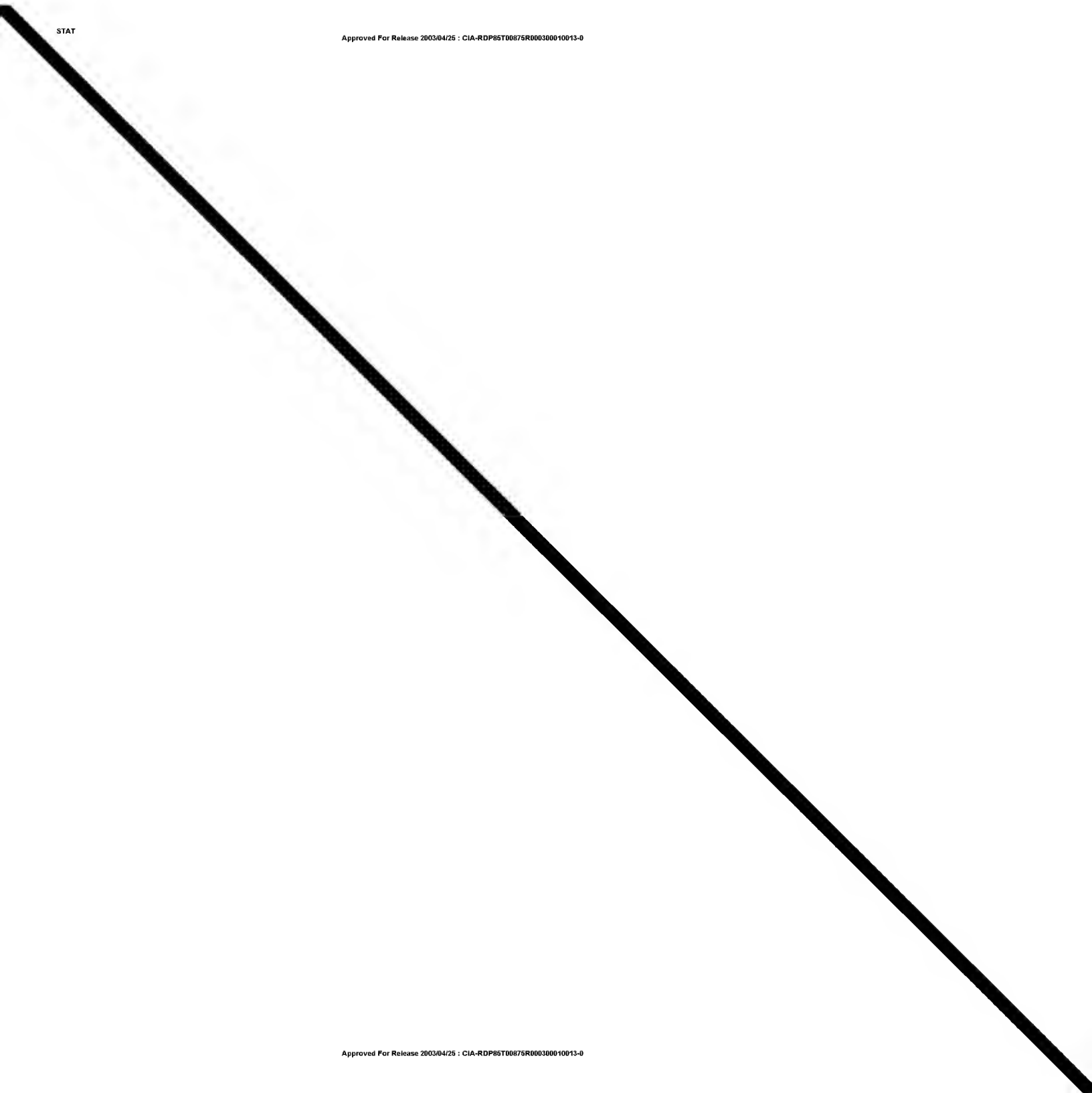
In the area of political work -- to determine and carry out measures for mobilizing personnel to prepare for the forthcoming actions and aimed at raising combat readiness and improving morale.

In the area of engineering support -- to calculate the forces and means, to determine the possible need for them, to designate their basic disposition and the possible amount of tentative tasks, to begin carrying out some of them (for example, to begin equipping the water supply points and to reconnoiter the exits from the concentration area in the direction of the expected advance of the troops), to prepare equipment for raising the cross-country capabilities of vehicles, designating column routes and passageways through mine fields, to outline measures in preparation for crossing water obstacles, and so forth.

In the area of rear services -- to determine the procedure for replenishing supplies of materiel and for medical support in the occupied area and during the movement of the troops, to designate the time period and the volume of work for the servicing of equipment, to provide for the allocation of forces and means for the technical support of the troops and to outline the overall procedure for organizing it during movement to the forward edge of the battle area.

Complete instructions can be given on camouflage in the occupied region and during movement from it, for organizing security, for countering airborne landings and reconnaissance-sabotage groups, for defense against incendiaries and for air defenses of the subunits by their forces and means, and for the preparation of the personnel and equipment for combat.

It is also essential and possible basically to resolve the question of the organizational composition of the operations centers, their equipment and place during the period of moving up the troops. To a significant degree, it is also possible to outline measures in the area of organizing communications, having reserved a portion of the forces and means for establishing communications with possible means of support and adjacent



units. Finally, and this is also quite important, to indicate (specify) and inform the personnel of the signals for warning, target designation, identification and coordination, including, without fail, with aviation.

Certainly, extensive work in preparing for the offensive and in insuring its effective organization can also be done ahead of time by the staffs.

In a word, even before receiving a mission many necessary instructions can be given on preparing for and supporting the forthcoming combat operations. Their scope and content in each specific instance will vary. Undoubtedly, not all these instructions are applicable for each troop formation, particularly in regard to security, camouflaging, the engineering preparation of the areas and positions, the organization of warning, and so forth. The issued instructions, of course, will not always remain unchanged. A portion of them (obviously, the smaller one) will subsequently be modified.

Depending upon the echelon organizing the battle, the instructions can be both written and verbal. It is very useful if the instructions are worked out ahead of time with a list of measures which, for example, would be carried out immediately upon arrival in the assembly area without orders from above. This introduces an organizing principle into preparations for carrying out the forthcoming combat mission.

It should be noted that according to the traditional training system these tasks are performed only after organizing coordination.

But it is essential to stress that we do not entirely reject the traditional system of organizing combat. As elaborated by the experience of generations, it has proven fully effective in the past, when more time was available for preparing for combat, when the dynamicness of combat was not as intense, and the frequency and abruptness of changes in the situation were not so significant. The traditional system sometimes can also be applied in our times, for example, in conducting research-type command post and staff military games. It is also applicable in the initial training of officers in the methods of decision making and determining measures for organizing combat. Subsequently, for the purposes of developing the skills of operational efficiency in the work of officers, in our opinion they must be taught to organize combat in the same manner that they will do it under the conditions of a modern combat situation.

Thus, the method of the stage-by-stage organization of combat helps to maintain the constant combat readiness of the troops, to develop in the officers the habits of continuous analysis of the situation, anticipation of its development, and display of initiative, foresight, resourcefulness and efficiency in preparing for combat operations. It is also very important that the unit commanders, and particularly the subunit officers,

be given significantly more time, including daylight hours, for organizing combat directly on the terrain and that the responsibility of all responsible officers for the assigned area of work be greatly increased.

The efficient organization of combat operations on all command and staff levels is greatly increased if advanced experience is properly reflected in the official manuals and in the popular literature and training aids. In them it is important first of all separately to examine the organization of combat and the control over the implementation of combat missions. In the process the effectiveness of solving the designated particular problems of control is increased. In thoroughly and more completely examining the organization of combat it is possible and essential to analyze the essence of this process, to show its principles, and to determine the demands on organizing combat operations and the ways for raising its efficiency. It is also essential, in our view, to state the recommendations on organizing combat as well as for the types of support in sequence, that is, before receiving the next combat mission and after receiving it.

At the same time we make no claim to a final solution for any part of such an important general problem as troop control. USSR Minister of Defense Mar SU A. A. Grechko has pointed out: "The mastery of scientific leadership methods is acquiring urgency. We do not have the right to forget that the methods and forms of troop control used today may be obsolete and inapplicable tomorrow (emphasis ours, V. V.). They should be developed and improved in step with the achievements of scientific and technical progress and developments in the military field.

"The leadership and control of troops, based upon a theoretical foundation, on high political awareness, on military-theoretical and military-technical knowledge, are one of the conditions for further raising the combat readiness of the troops. For precisely this reason questions of control should in the future remain at the center of attention for commanders, staffs and the political organs, and be a matter of their particular concern."

# SOME PROBLEMS OF SURPRISE IN WARFARE

Translated by Col I. Andrushkevich

The Polish military journal Mysl Wojskowa published in 1970 a series of articles on problems relating to the element of surprise. For the benefit of our readers we present below an abridged translation of an article by Col Dr L. Kuleszyński.

* * *

Much attention, both from the standpoint of theory and practice, has been devoted to the problem of surprise in warfare since ancient times. Although the essence of surprise remained unchanged for hundreds of years, its comprehension and explanation became broader and deeper as human knowledge grew. The more this conception approached objective truth, the more practical benefit could be derived. During this time the mechanism of effect of the element of surprise remained essentially unchanged. But the forms and consequences of its effect on man changed together with development (chiefly mental) of the individual and groups within society. Of course reaction to the unexpected on the part of primitive man and modern man is totally different.

Together with development of means and methods of warfare, change in its properties and character, there occurs a change in the role of surprise as a factor in victory or defeat, as well as the potential, forms and methods of utilizing and countering surprise.

## The Essence of Surprise and the Nature of Its Action

A definition of surprise as formulated by Col J. Żeltowski reads as follows: "...The quintessence of surprise from the military standpoint can be concisely expressed as follows: surprise is a phenomenon produced by unexpected vigorous action by the enemy, action which exerts a powerful psychological effect, disrupting one's inner equilibrium and thus depriving one of the ability to react quickly and effectively to a threatening danger."

Thus it is asserted that surprise constitutes merely the result of vigorous enemy actions. Elsewhere Col Żeltowski writes that surprise "evokes a collapse of morale (fright)."

Surprise, however, is the result not only of vigorous actions by the enemy. It can be produced, for example, by the concealed withdrawal of enemy

forces from defended positions on which friendly forces have directed fire preparation and have initiated an attack. Enemy inactivity in a situation in which vigorous actions were expected can also constitute surprise (and therefore can have a strong effect). Not necessarily human activity is the cause of surprise. Surprise can also be generated by the forces of nature (earthquake, flood, etc). On the basis of results, surprise is not always negative, evoking only a collapse of morale and fright. It can also b positive, evoking a feeling of relief, satisfaction, or even joy.

A question arises in examining the effect of surprise on a person: are only two states possible -- to be taken totally by surprise or not, or is there a middle state possible, that is do there exist various degrees of surprise? The degree of confidence (conviction) in an event which will take place can range from total confidence (P=1) to total uncertainty (P=0). When we say: "I'd bet my life on it" or "I wouldn't bet my life on it," we are expressing various degrees of our certainty about an anticipated event, thus confirming the existence of these subjective degrees.

A term borrowed from cybernetics -- entropy of a specified event or state (situation) -- is best suited to describe degree of unexpectedness connected with knowledge (or ingorance) of what may occur (of what one may encounter). The less one expects, that is the less likely, an event (phenomenon, state) which we directly encounter or about which we only receive information, without observing the event itself and without perceiving it physically, the greater the degree of surprise. Degree of surprise can be expressed with a quantity which is in an inverse relationship to the probability of the event.

As regards the effect of surprise, it is determined primarily by the nature of the surprise. It is one thing when one directly experiences the effect of surprise, and another thing altogether when one merely receives information on an event (phenomenon). In both cases the degree of surprise may be identical, but the force of its effect will be unequal.

Surprise is a concept pertaining to information science. It is a state of the human intellect which constitutes the result of the brain receiving information on an occurring event, comparison of that information with information already present on the event, and elaboration of the conclusion that something unforeseen and unexpected has happened, consequently something for which we were prepared neither mentally nor physically (completely or partially).

One can also state that surprise is a state of consciousness produced by a specific event and consisting in the conviction that something has occurred which is not in conformity with our previous ideas, something unexpected (unforeseen).

Effect Mechanism of Surprise

The events and phenomena which take place around us produce in us feelings (emotions), that is a certain attitude toward them, whereby this attitude is determined not only by those indicators of events and phenomena which are directly perceived by us, but also by that significance which an event or phenomenon has for us in a concrete situation, as well as by the information they bear, what they indicate. For example, the sound of artillery fire and the sound of projectiles in flight generate within us a sense of danger and fear when the enemy is firing, and a feeling of satisfaction if friendly artillery is firing.

Our sensations can vary in strength: relatively powerful but brief sensations are called emotion. When a sudden, unexpected event is dangerous for us (threatening, harmful), it generates concern, alarm, fear or terror, depending on the force of the surprise. This force can be viewed as the resultant of several factors: degree of surprise, magnitude of danger, as well as the individual's temperament and character.

The greater the degree of surprise and danger presented by the unexpected event, the greater the effect of the surprise. Two persons taken unawares by an event which presents an identical threat to them may react differently, depending on their temperament and character. Surprise will undoubtedly produce a stronger reaction in a choleric than, for example, in a phlegmatic individual. Even the reaction of two choleric individuals, however, can differ, depending on the individual character traits, such as courage and bravery. The force of surprise can be expressed with the following diagram for a specific individual with a specific type of temperament and specific character (Figure 1). The measure of the force of surprise here is the magnitude of the resultant and vectors $C_1$ and $O_2$, $C_2$ and $O_1$, $C_3$ and $O_3$, respectively equal to $W_3$, $W_1$, and $W_2$. It follows from Figure 1 that although $C_1<C_2$ and $O_1<O_2$, the force of surprise in both cases is identical ($W_1=W_3<W_2$).

Negative emotions evoked by surprise lead to the excitation of certain and inhibition of other nervous centers and essentially affect the entire organism, not only the mind. One experiences an accustomed feeling of fear, which produces inhibition of psychological activity, inability (or reduced ability) to act. As a result one is for a certain time totally unable to move, or else his motor reactions become instinctive and not conscious, or the duration of conscious reaction is increased, whereby this reaction is frequently erroneous.

Powerful fear produces panic. A person seized by panic acts irrationally, and his panic state is inductively transmitted to those around him. Thus one person who has succumbed to panic may in a certain situation generate panic even throughout large groups.

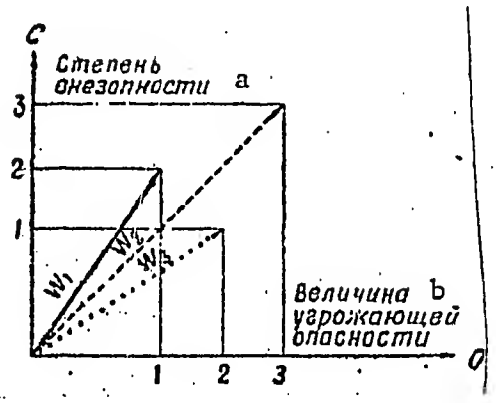



Figure 1.

Key to figure: a -- degree of surprise; b -- magnitude of danger

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The effect mechanism of surprise does not reduce merely to a person's reaction at the moment an unexpected event occurs. If we are dealing with surprise constituting the result of enemy action, it must be assessed from the standpoint not only of what this enemy has done, where and when, but also from the standpoint of how we previously had estimated his potential actions (development of events), what incidents and situations we had foreseen.

Quite obviously it is impossible to foresee everything which may occur under specific combat conditions, if only because we will not possess exhaustive information on all factors affecting the course and outcome of combat, particularly on the enemy's situation and intentions, but also due to those random factors occurring very frequently on the battlefield and which cannot be known in advance either to us or to the enemy.

We believe that it is also obvious that even if we were capable of foreseeing events in the fullest and most optimal manner, we would nevertheless be unable to prepare ourselves physically for all possible danger situations.

One must bear in mind, however, that surprise is a mental state. If we are psychologically prepared for possible events or situations (or even only for the most dangerous events or situations), we shall at least to some degree avoid mental shock, since we shall be aware that an event has occurred the possibility of which we had foreseen and for which we had been psychologically, if not physically prepared.

If one does not foresee certain events and situations, fails to take them into consideration in one's deliberations and plans, and fails to take timely steps, one can be taken totally by surprise. Additional time will be needed to regain control of oneself, to become aware of what has happened, to analyze the unexpected situation, reach a suitable decision, to work out a plan of action and proceed in its execution. During this time the enemy will be able to achieve his aims, to predetermine the further course and outcome of the engagement or create a new unexpected situation, and the above cycle will reinitiate.

Thus the elements of surprise in the swift and decisive actions of one of the belligerents, and swift utilization of the results achieved by the surprise, can lead to another surprise (an entire sequence of new, unexpected actions), which per se may constitute a sufficient immediate cause of the collapse of the other side. Both individual soldiers and groups are subject to the effect of surprise. Although the mechanism of surprise is always the same, its social results obviously vary, depending on who has been taken by surprise: an individual soldier, a group of soldiers, a commander, staff, or entire large unit.

The Role of Surprise in Combat

The role of surprise in combat is determined by its results. Surprise per se cannot be the objective of an operation. It is only a means, correct utilization of which promotes the success of an engagement and victory, but it does not supplant the engagement proper.

As is evident from Figure 2, surprise affects the result of an engagement indirectly, through fire and maneuver. Between surprise and maneuver, as well as between surprise and fire, there develops an additional functional feedback. The greater the surprise, for example, then the faster and more effective maneuver becomes, and the easier it is to take an advantageous position. Swift and successful maneuver in turn promotes the attainment of new surprise. The situation as regards fire is analogous. Surprise by means of the mechanism of its effect and the results to which it leads substantially facilitates utilization of firepower and increases its effectiveness. Powerful and effective fire, heavy enemy losses produced by fire, promote the attainment of new surprise.

We should add that surprise can be achieved precisely by fire or maneuver. After it has been achieved, however, the next step in that game, the engagement, is always facilitated -- the next maneuver or artillery attack; the rest depends on their expediency and effectiveness. Consequently, surprise achieved in the course of intelligent actions promotes success in combat, and the effectiveness of this success is in direct proportion to the magnitude of surprise and the degree of utilization of the consequences of surprise.

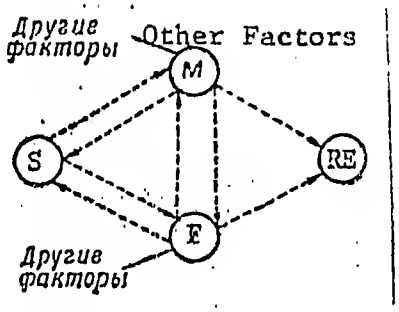


Figure 2.

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What is the role of surprise today? Since troop combat capabilities have increased immeasurably (even of conventional weapons, let alone nuclear arms), and specific battlefield results can now be achieved with smaller forces and much faster than in past wars, the role of surprise has substantially grown, and its consequences have become more serious and dangerous than in the past. Hence there is an increased endeavor to achieve surprise in one's own actions and to counter surprise actions by the enemy.

Is surprise a factor which is continuously in effect on the battlefield or is it temporary, transitory? Discussions and debates held on this question are in our opinion explained by a lack of mutual understanding and precise formulations on this moot question.

Surprise as a mental state is of brief duration (temporary). It produces more or less protracted consequences, however, depending on force and scale. The surprise may pass, but its psychological effect will remain for some time. The duration of the effect of surprise cannot be measured by the duration of emotional effect in the person (or group) taken by surprise, since the feeling proper cannot be recognized and measured. It can apparently be measured only by the overall duration of external psychophysical manifestations, which operate even after one has perceived what has occurred and how.

In insignificant (in time) actions surprise is manifested throughout the entire time during which the action proper is occurring. For example, during the capture of a prisoner, the action of removing a sentry, in a fire ambush or other situation where the objective is reached so quickly that by the time the action has terminated the surprised enemy is unable to "recover" and reestablish his previous state of equilibrium.

When the actions during the course of which surprise is achieved are of greater duration, the enemy's state of confusion may pass before the stated objectives have been achieved. In this type of situation surprise is a temporary, transient factor. If the two sides are sufficiently prepared for war, surprise will always be a temporary factor (although this does not signify that it cannot exert substantial influence on the course of the war).

As for the question of whether surprise exerts decisive influence on the outcome of a war, we assume that theoretically, under certain conditions, an affirmative answer can be given. In order to substantiate this it is necessary to simulate these specific conditions, perform an appropriate analysis of the problem and only then give an answer.

Possibilities of Achieving Surprise and Countering Surprise

Surprise, from the standpoint of scale and the scope of its consequences, can be broken down into strategic (affecting the results of the entire war or campaign), operational (affecting the result of an operation), tactical (affecting only the course and result of an engagement), and individual (affecting individuals).

The greater the scale of surprise, the more difficult it is to achieve, since a greater quantity of manpower and weapons is involved, and this increases the difficulty of concealing one's intentions from the enemy. It is relatively easier (but not simply easy) to achieve tactical surprise, while it is more difficult to achieve operational surprise and the most difficult to achieve to achieve strategic surprise.

The enemy can be taken by surprise on the battlefield in various ways: one can do that which the enemy did not expect (type of action surprise); one can employ an unexpected method (method of action surprise); one can take action at a time at which the enemy least expects it (time of action surprise); one can take action at an unexpected point (place of action surprise); one can employ means of combat which were unknown up to this time (means of combat surprise).

The above-enumerated forms of surprise can be employed either each separately or in some combination and, as an exception, all at the same time. The basis for a manifestation of surprise is a lack of perceived information on the possibility of a specified event at a specified time or at a specified place. Consequently, in order to achieve surprise it is necessary to endeavor to limit the enemy's information-gathering capabilities, particularly the capability to acquire correct, useful information; one must endeavor to keep one's activities secret, to deceive the enemy, to disorganize him, by disrupting his system of communications.

The following promote achieving the element of surprise:

destruction of hostile reconnaissance means, whereby under present-day conditions destruction of electronic intelligence-gathering devices is of particular importance;

fire neutralization and active jamming of the enemy's communications system, leading to reduced enemy capability for exchange of information, troop warning and control;

precise information on the position, state and actions of hostile troops, as well as on the capabilities of friendly troops, which will make it possible to wait for the most favorable moment for planned actions, to select the most expedient form of action, and to assign appropriate forces and means;

involvement in engagement (operation) planning of a strictly limited number of persons, with information proceeding to each on a strictly need-to-know basis;

tactical and operational camouflage, as well as other forms of deceiving the enemy (for example, feinting actions or dissemination of false information);

all measures deteriorating the enemy's political and morale state, for the lower this state is, the easier it will be to achieve surprise and the more serious consequences it will produce. Such measures include various forms of propaganda (leaflets, radio broadcasts), continuous harassment fire, and sabotage activities, particularly at night and when enemy troops are resting;

absence of a recognized pattern in activities, a search for original and effective solutions. Expected-pattern actions make it difficult or impossible to achieve surprise. For example, an attack at dawn, when the enemy is exhausted, can take him by surprise. But this should not become a regular pattern, for the enemy may prove to be the most vigilant precisely at dawn;

swiftness of action and retention of initiative. Swift, decisive actions lead to an abrupt situation change, which of and by itself may stun the enemy, making it difficult for him to adjust to the situation, making it impossible to obtain breathing time, to estimate the situation and to reach a new decision;

precise observance of specified procedures and rules for conducting communications, as well as absolute guarding of military secrets;

maintenance of a continuous high state of troop combat readiness and troop capability to undertake any actions at a moment's notice. Conditions favorable for taking the enemy by surprise pass very quickly, while a high degree of troop combat readiness promotes utilization of such conditions on very short notice.

We should also emphasize that the achievement of surprise by one of the belligerents is not always the result of conscious, deliberate action. Surprise can be the consequence of errors and subjective shortcomings at the command echelon of the side which has been taken by surprise. In planning his actions the enemy may not even count on achieving surprise at a specified time and at a specified place. But if friendly reconnaissance has performed poorly and we fail to receive prompt intelligence on the enemy (or if the intelligence has been wrongly interpreted due to a lack of knowledge and experience), the enemy's actions will take us by surprise. Continuing this thought, one can distinguish between planned and unplanned surprise, whereby, as the experience of past wars indicates, the achievement of surprise planned in advance is a very difficult thing, particularly under present-day conditions, taking into account the increased dynamics of combat operations.

It is very risky to plan on achieving specific surprise at a specific place and at a specific time, to consider surprise a priori as an accomplished fact, used as a basis for planning subsequent actions; this risk increases with increasing distance in time and space between planning and action to achieve surprise. It is no less important to suprise the enemy command and staffs in addition to enemy troops. But if the effect of surprise can generate panic among the enemy troops or can evoke inexpedient actions, commanders and staff will undoubtedly stand up better under such pressure, and it will be difficult to obtain information on the extent to which they were affected by the surprise. Confusion among commanders and staffs can lead to a situation where they will fail to make the correct decision in a timely manner or will make a decision hastily and erroneously, diminishing the effectiveness of actions taken by their troops. Bearing this in mind, one should organize and conduct combat operations in such a manner that they always contain a high "surprise potential," aimed first and foremost at affecting enemy commanders and staffs.

As has already been stated, one is taken by surprise by that which is unexpected, that which is contrary to what we have imagined and foreseen. The latter, however, is to some extent determined by that picture of the future battle which each paints in advance in his imagination, as well as chiefly by the habits he develops. Without question if from the beginning of the war everything which occurs differs from our previous notions, this will produce confusion. Therefore when training troops in peacetime exercises one should not permit commanders to receive a large quantity of information which paints a clear picture of the situation. In real combat,

when all types of unexpected events are possible, they could become confused, and this will affect their ability to command their men. In addition to the above-mentioned psychological consequences, in this situation such commanders will prove to be simply unprepared for any intelligent decisions or actions.

Countering surprise boils down to ensuring that one is not taken by surprise; if this attempt is unsuccessful, then it is essential to reduce to a minimum the consequences of surprise, to neutralize them in a prompt manner. We shall examine how this task can be accomplished.

1. It is essential carefully to study modern methods of conducting combat operations as well as the potential character and features of a future war. Through profound analysis, scientific prediction as well as simulation of specified phenomena, processes and situations during field exercises, one should continuously improve the probable picture of the future field of battle, in order that it become as close as possible to the actual future situation, so that those situations which one will encounter in a future war will differ to a minimum degree from our present views and assumptions. This aggregate of views on the various aspects of a future war, which should be as adequate as possible, should become the basis for training troops in peacetime, for their indoctrination, organization, equipping, etc. Also extremely important is strict, absolute adherence to the old but wise and still valid principle: teach the troops that which is necessary in war, and in conditions closely approximating actual combat, without artificiality, excessive simplification, facilitation or embellishment. Field exercises should be a model of combat -- otherwise one cannot avoid at the outbreak of war confusion and all its consequences.

2. Improve ability to predict. On the field of battle it is necessary to think primarily not about what was or even what is, but rather about that which will be. It is essential to foresee not only what the enemy may undertake, where, and when, but also what will be the deliberate or unintended results of our own actions. This must always be clearly seen. In order for our assumptions to possess a realistic foundation, one should eliminate subjectivism and voluntarism from them, basing them chiefly not on intuition but rather on a logical, dialectical, sober comprehension of the situation, reinforced where necessary by specific calculations. In order to predict with success it is essential to be knowledgeable on the laws and relationships manifested in combat, the capabilities of friendly and hostile troops, the foundations and methods of the enemy's actions. One must be able to ensure securement of the requisite correct information on the situation.

The ability to foresee is a powerful weapon against surprise, no less important than a good carbine, gun or tank, and from this standpoint considerable attention should be focused on learning this skill throughout the

entire process of combat training: from recruit training in the subunit and at OCS or service academy, including training of large units, headquarters and military establishment command-echelon cadres.

3. One must develop and improve the reconnaissance and intelligence-gathering system, for without intelligence troops are blind and deaf, with no knowledge of where, when, from what direction and what kind of an attack they can expect.

Under present-day conditions it is essential more than ever before to have the ability to maintain continuous battlefield observation. It is necessary to organize and conduct reconnaissance correctly. If we endeavor to learn everything about everything, there will be very little benefit, since reconnaissance simply will be unable to accomplish a great many tasks. Reconnaissance and intelligence-gathering effort should be aimed at obtaining current intelligence needed by the commander to accomplish his missions, and proceeding from his situation estimate and intentions. Purposeful reconnaissance enhances the chances of not being taken by surprise.

We should also emphasize that the acquisition of specific information and knowledge of concrete facts constitute only a part of reconnaissance and intelligence activities. A second and more important part consists of analysis and synthesis of acquired data, as well as their correct interpretation. The more carefully this is done, the easier it is to counter surprise on the part of the enemy.

4. In order to avoid being taken by surprise, one should not accept a mode of action forced by the enemy, since that which is good for him cannot be good for us. One should avoid provocations by the enemy.

5. It is necessary at all times to warn subordinate troops and headquarters of possible (predicted) surprise enemy actions and to inform them when there is an immediate threat of such actions. This will make it possible either to counteract the surprise or at least substantially to attenuate the results of the surprise.

6. In order to guarantee prompt acquisition of information and its transmission to subordinate troops, it is necessary to ensure a high degree of survivability and to maintain a continuously high reliability of information systems. If in spite of our best efforts the enemy has succeeded in gaining the element of surprise, one should immediately concentrate efforts on swift and effective neutralization (or at least minimization) of its consequences. Appropriate steps must be taken in order that the enemy can derive as little benefit as possible from the achieved surprise (while friendly troops sustain minimum losses).

Neutralization of the consequences of achieved surprise is promoted by:

maintenance of a high degree of combat readiness, making it possible quickly to neutralize the consequences of achieved surprise, as well as a high degree of discipline, political-morale and physical state of the troops (exhausted, hungry and cold troops succumb more easily to the effect of surprise and are more susceptible to fear and panic). A high level of ideological indoctrination as well as confidence in the commander and in one's unit help combat fear and reduce the consequences of surprise;

rapid situation estimate with the aim of determining the principal danger or threat in the prevailing situation, and concentration of all resources to combat that threat;

prompt and full information to troops subjected to unexpected, surprise actions by the enemy on the current situation and threat, with precise specification of its actual dimensions. Troops should fully trust information given by their commanding officer, and this confidence must be developed in them at the very outset;

a personal example of self-control, self-confidence and decisive actions on the part of command personnel. Composure is just as infectious as fear and is just as easily transmitted to those around. Self-control and composure should constitute a mandatory quality of command personnel;

troops should not be permitted to remain inactive, for it has been proven that idleness and a state of waiting can engender fear, while vigorous actions neutralize fear;

knowledge by military personnel of the essence of fear and its mechanism of action, as well as the psychological means of neutralizing and eliminating it;

rapid and intelligent utilization of available manpower and weapons, as well as that portion of the troops which has not been subjected to the surprise, with the aim of vigorous countering action against the enemy, in order to avoid giving him the opportunity to exploit the results of the surprise actions.

Surprise is a substantial factor which influences the course and outcome of combat, and appropriate attention should be devoted to it. It is important, however, not only to achieve further development of the theory of surprise but also practical utilization of present knowledge on this problem in order to develop in troops, commanders and staffs the ability both to achieve the element of surprise and to counteract it.

# COALITION AIR DEFENSE

(Based on Materials Published in the Foreign Press)

Col B. Zabelok

The most significant results of the modern military technological revolution began to appear in the development of military affairs at about midpoint in this century. This was expressed primarily in the fact that aircraft and ballistic missiles, as the primary vehicles for the delivery of nuclear weapons, took a leading position in the arms arsenal. The significance of air defense of the highly-developed nations has correspondingly taken a sharp upsurge, and the spatial framework of air defense has greatly expanded; the zone of air defense responsibility encompasses vast territory, including heartland regions which in the past could not be reached by air attack.

In addition, a number of imperialist nations, joining into aggressive military alliances and regional blocs, alongside the priority development of offensive strategic nuclear forces, proceeded to establish coalition air defense systems in the interest of supporting their predatory plans. In 1958 the national air defense systems of the United States and Canada merged, with the establishment of an air defense command for the North American continent (NORAD), while 2 years later the Western European NATO member nations signed an agreement calling for consolidation of their air defense capabilities and facilities into a unified bloc system.

The establishment of coalition air defense systems, if this phenomenon is viewed from a military standpoint, aims at more fully and better realizing the overall potential of a group of nations in the interest of providing air defense for their economic and military potential, since important advantages are achieved by such a move. In the first place, air attacks can be opposed by the coordinated actions of large air defense forces not of a single country but of several.

In the second place, favorable conditions are created for successfully solving a problem, which is particularly critical within the bounds of the European continent, the problem of time and space required by air defense forces to destroy air targets. It reduces essentially to the following. Modern supersonic aircraft can cross the territory of the majority of European nations in 10-20 minutes. It is extremely difficult and sometimes impossible to intercept and destroy such aircraft by air defense means within the boundaries of a single country. In addition, the territorial bounds of such countries have become "too confining" for fighter aircraft and long-range antiaircraft missiles, since these air defense weapons are capable of operating to a greater range than is permitted by a country's borders.

In the third place, the problem of combat readiness is more easily solved, for with the availability of radars sited along the outer perimeter of a coalition, a portion of the active air defense means, located in the support echelon and at depth in relation to the potential enemy, has the requisite time to organize repulsion of the enemy. In connection with this, less rigid demands are imposed on them as regards degree of readiness than is the case for air defense means performing missions in the frontier zone. Fighter-interceptors, for example, are capable of operating from a status of "ground alert," while in the frontier zone "airborne alert" may be required in an analogous situation.

Unification of air defense systems provides a number of other advantages as well. In particular, opportunities are created for more efficient and economical deployment of forces and weapons as well as for increasing the survivability of the system as a whole and of its separate elements; improved conditions are secured for extensive maneuver of forces and weapons, for effecting continuous engagement of the air attacker within the entire defended airspace, etc.

It is also noted that within the framework of a unified system it is possible to utilize more efficiently national resources allocated for air defense purposes, and this is of exceptional importance, particularly in view of the constantly rising cost of arms. Foreign experts figure, for example, with the cost of establishing an ABM defense system, a space monitoring and space weapon defense system is beyond the financial capabilities of any one Western European nation. Such a problem can be resolved only by joint efforts.

Military-political aspects of the problem. In the opinion of foreign specialists, a coalition air defense system should not be viewed as a simple sum of national systems. It is characterized by a unity of design, subordination of component elements and parts to a common strategic plan, and the existence of coalition control entities. But it is formed on the basis of already existing and functioning national air defense systems as a result of their gradual combining and integration.

This process is extremely complex if one in addition bears in mind the fact that each country's air defense system is closely linked with important government measures, such as warning and protection of the civilian population, civil air movements, exercise of sovereignty over a nation's airspace, etc. Unification of the air defense systems of groups of countries naturally involves invasion of the sovereign prerogatives of individual nations and requires certain military-political, ideological and even psychological preparation.

In view of this fact, integration of national air defense systems is effected on the basis of coordinated military-political decisions made by the top-level government and military bodies of the coalition member nations. These decisions determine the missions, strategic plan of arrangement and structure of the coalition air defense, each country's contribution to building the system, separation of the functions of the coalition and national commands in regard to supervising and controlling air defense forces, the nature of basic measures connected with unification of national systems and the sequence of their implementation, as well as the direction to be taken by further development and improvement of the air defense system.

These decisions may be preceded by organization of a joint body to draft proposals pertaining to the establishment of a common air defense system, by exchange of plans for constructing air defense, and by elaboration of joint plans for operational and combat training.

A particularly important place in the complex of military-political questions is occupied by determination of advisable limits of integration, which is expressed chiefly in the correlation of functions of the coalition and national air defense command. Absolute integration, when a joint system assumes the nature of air defense of a single country, as it were, and all air defense means are fully and in all respects subordinated to the coalition command, may lead to a situation whereby some countries will be less interested in improving the system, since they will not bear direct responsibility for it. On the other hand, insufficient integration leads to a weakening of the capability of the coalition command to concentrate at the requisite time and place adequate air defense forces, to unify and coordinate their actions.

The requisite level of integration of national air defense systems is determined on the basis of analysis and comprehensive consideration of a number of political, economic and strategic factors. The first group includes in particular such factors as the attitude of countries (governments, peoples) toward the assignment of a portion of their air defense forces to carry out common coalition missions and their utilization on the territory of an allied country. The second group includes acceptable bounds of material outlays connected with the establishment of a common air defense system, and distribution of outlays among coalition partners. The third group includes the degree of improved air defense effectiveness in areas and in directions of attack, improvement in combat readiness, stability and other military factors.

Within the air defense system of the Western European NATO nations the principle of integration is expressed in the fact that even in peacetime their air defense forces are under the supreme commander of joint NATO

armed forces in Europe. He bears responsibility for organizing air defense and utilization of the means allocated for air defense in both peacetime and in time of war. The authority of the national command in regard to these forces consists primarily in exercising the functions of administrative supervision, supply and support services.

Within the system of imperialist blocs integration in general and military integration in particular are subordinated to aggressive aims -- to unify the forces and resources of a group of nations in the interest of carrying out the expansionist policy of the leading imperialist powers, particularly the United States. Establishment of the joint air defense systems of the Western European NATO nations and the nations of the North American continent is dictated by the endeavor to provide their armed forces with favorable conditions for the initiation of aggression and to secure the rear areas.

Tasks and structure of coalition air defense. The general tasks of coalition air defense, in the opinion of foreign experts, can be subdivided into three groups: continuous aerospace surveillance, detection of the initiation of an air attack and warning of such an attack communicated to top military-political bodies, strategic attack forces, air defense forces and civil defense bodies; in peacetime and at times of international tension -- defense of the inviolability of the coalition's airspace, engagement of hostile air attackers and maintenance in a state of readiness of forces commensurate with the situation, capable of repelling an air attack; during time of war -- defense against air attack of vitally important areas and installations, armed forces, and friendly nuclear capability in particular.

The opinion has been expressed that the term "air defense" under present-day conditions is becoming increasingly closer to the term "aerospace defense," since its missions should include defense of the coalition's military and economic potential not only against aircraft but also against strategic ballistic missiles and space vehicles.

Within the framework of NATO, where the territory of the NATO member nations is viewed as a probable theater of military operations, joint air defense, in addition to defending important industrial-economic regions and installations, is assigned a broad range of missions connected with supporting armed forces operations. In particular, it must provide air defense of forward strategic echelon troops, armed forces and reserves concentration areas, missile sites, airfields, nuclear warhead storage facilities and supply bases to entire theater depth. Primary missions include protection of lines of communication, transport centers and major ports. It is believed that joint air defense forces will also assist ground troops in engaging airborne assault forces, air forces in gaining

air supremacy, and naval forces in conducting amphibious landing operations and troop evacuation operations.

Proceeding from these tasks, coalition air defense must be highly flexible and capable of meeting the requirements of both a nuclear world war and limited wars.

As regards the structure of coalition air defense, it includes: an early detection and warning system, several large air defense zones or regions, and a unified control system.[1] All these elements are organically interlinked and only as an aggregate secure the functioning of coalition air defense as a strategic system. The early detection and warning system has the task of detecting the initiation of an air attack at the earliest possible time and of warning the coalition military-political leadership, the armed forces, as well as strategic nuclear forces and air defense forces, plus civil defense bodies. Some foreign experts consider this task to be the most important mission of present-day air defense.

An early warning system on the scale of a joint air defense system is established on the basis of a unified plan along the entire or almost the entire perimeter of the coalition. Such a system is based on ICBM and IRBM detection facilities. For example, NORAD includes the BMEWS system, which consists of two powerful, extremely long-range detection radar complexes located in the far north (in Alaska and Greenland) and one complex located in Great Britain. These facilities can warn of an initiated missile attack from the north 15 minutes before the attacking missiles reach targets in the United States. The early warning system of the Western European NATO nations is based on the information provided by these radar complexes, particularly the one in England (at Failingdales).[2]

The ballistic missile early warning system is an important strategic intelligence element. In the joint NORAD air defense system it operates in coordination with a space surveillance system and a missile submarine detection system (within the ASW system).

Early detection and warning of attacking enemy aircraft is handled by long-range radar stations. Along the land borders of the Warsaw Pact nations the NATO command has deployed a line of radar stations with a middle and a high-altitude detection range in excess of 500 km. In the North American Joint Air Defense System the first line of distant early warning posts (called Dew Line), extending from the Aleutian Islands to Iceland, runs across Northern Alaska and Canada. Wherever feasible, detection radar sites are located on islands, in order to increase depth of detection. On the NATO northern flank the islands of the North Atlantic are used for this purpose, and on the southern flank -- islands in the Mediterranean. Radar picket ships and aircraft, which maintain surveillance in areas advanced far forward from home territory, are used for the same purpose.

Air defense zones (regions) constitute as it were large operational formations, encompassing the territory of one or several countries and including their air defense forces. The total number of zones and their dimensions are determined on the basis of political, military and geographic considerations. It is considered essential thereby that the territorial boundaries of zones satisfy two basic principles: first, that they guarantee the time and space required to complete all stages of engagement with an air attacker, from detection to destruction; second, that they ensure coordination of organization of joint air defense with the structure of strategic command on a coalition scale.

For example, the unified air defense system of the Western European NATO nations consists of four zones. Three of these zones -- the Northern (Denmark and Norway), the Central (West Germany, the Netherlands, Belgium, Luxemburg), and the Southern (Italy, Turkey, Greece) territorially coincide with the Northern European, Central European, and Southern European theaters respectively and are under the commanders in chief of the joint armed forces of these theaters.[3]

On the territory of Great Britain, in view of its somewhat separated geographic position and to some extent for reasons of political prestige, a separate, purely British zone has been established -- the Atlantic Air Defense Zone, which is under the commander of the British Air Force offensive air command. Air defense zones are in principle capable of accomplishing all missions involved in repelling a hostile air attack. They in turn are divided into sectors or regions, which usually encompass a single country or a part of its territory.[4]

The composition of air defense forces and their disposition within a zone are determined by the strategic importance of targets on the defended territory, its size, the deployment and possible nature of operations by troops deployed in the zone, the position of the zone in respect to probable directions of enemy attack from the air, sea and land. For example, in the Central European Theater, where the bulk of NATO armed forces and the military-industrial potential of Western Europe are located, a particularly strong air defense has been set up, effected by air defense forces allocated by the United States, Great Britain, West Germany, Belgium, and the Netherlands. It is based on antiaircraft missile facilities forming a solid zone of missile defense over practically the entire land area of the theater. Along the common border with the Warsaw Pact nations, from the North Sea to the Alps, West Germany and its allies have deployed two antiaircraft missile lines. The first consists of Hawk antiaircraft missile complexes and is designed to engage air targets at medium and low altitudes. The second line, deployed to the west (100-200 km from the eastern border of the FRG), consists of Nike-Hercules antiaircraft missile complexes.[5] Their mission is to destroy at medium and

high altitudes targets which have penetrated the first line. Behind these lines are deployed separate antiaircraft missile site configurations providing direct protection to the major political-administrative and industrial-economic centers in West Germany and the Benelux nations.

The main fighter forces, contained within the joint tactical air commands, are based at deep sites, with antiaircraft missile protection. Fighter-interceptor operations zones are located forward of the above-mentioned antiaircraft missile lines and deep inside friendly territory. Fighter-interceptor missions include swift concentration of efforts at those points where there is heavy hostile air activity, as well as the task of intercepting and destroying air targets which have penetrated deep into friendly territory, as well as covering the flanks of the antiaircraft missile lines.

In peripheral areas, where military targets are sited less compactly, usually local antiaircraft missile defenses are established to protect principal administrative-political and industrial centers. These are most frequently capitals and important military-strategic targets. These defenses as a rule involve antiaircraft missile units and large units of a single country, but the establishment of coalition defenses is not out of the question, in cases when important targets of neighboring countries are located contiguously and form a compact group. On the whole vital areas and the great majority of economic installations are protected primarily by fighter aircraft within the overall zone or sector air defense system. Such is the case of air defense on the NATO flanks -- in the Northern and Southern European theaters.

In strategic air approach corridors, where there is sufficient room for combat operations by air defense forces, air defense is based on the idea of moving advanced intercept points far beyond the boundaries of the most important defense regions. For example, this is the way NORAD air defense is arranged on the northern approaches. The system calls for intercept of the air attacker initially by long-range fighters, then by Bomarc unmanned interceptors and, when the air attacker penetrates U.S. airspace -- by fighter-interceptors in coordination with Nike-Hercules antiaircraft missiles.

In addition to national air defense forces, the unified zone or sector air defense system includes air defense capability organic to ground force units deployed in the given area, and in the naval air defense coastal zone -- embarked fighters, shipborne antiaircraft missiles and antiaircraft artillery.

The principles of employment of air defense units organic to ground forces units are quite diversified: they may be included within the overall national air defense system or may cover troops operating in an isolated area. Establishment of an antiaircraft missile umbrella is considered ideal, but this requires a substantial amount of hardware. At the initiation of military operations, ground troops and navy air defense forces will perform combat missions primarily in the interests of ground troops and navy. According to information in the foreign press, this is the proposed utilization of the U.S. ground forces 32nd Air Defense Command, deployed in the FRG (part of the Central Army Group), which contains 15 Hawk and Nike-Hercules antiaircraft missile battalions.[6] On the outbreak of hostilities they would cover ground forces advancing to combat areas and during the course of combat operations.

In the zone of immediate contact with the opposing coalition or group of nations, particular attention is devoted to organization of reliable air defense at low altitudes, in order to eliminate the possibility of being taken by surprise by the penetration of low-flying aircraft to targets and forces located close to the border. As mentioned above, this is achieved by employing in the first line of defense low-altitude antiaircraft missile systems, as well as light antiaircraft artillery accompanying ground troops large units and units. Based on the experience of the war in the Near East, the NATO nations are devoting considerable attention in the Central European Theater to antiaircraft artillery protection of airfields. It has been reported in the foreign press that in the FRG plans call for purchasing several hundred rapid-fire 20 mm antiaircraft guns for this purpose. Considerable effort is being devoted to the construction of protected positions for aircraft in the frontier zone.

A unified control system comprises an aggregate of interconnected command posts (operations centers) of various echelons and technical facilities (radar stations, jam-proof communications lines, high-speed computers, etc), exercising control of the coalition air defense forces and coordinating the actions of all elements in repelling an enemy air attack.

The primary functions of a unified control system are: collection, processing, display and analysis at the joint air defense command post and at lower echelons information on the aerospace situation and on the state and combat readiness of active air defense means; determination of variants of possible utilization of air defense capability; communication of the command's decisions to executing elements and coordination of air defense effort in the process of engaging the air attacker, as regards time, place, and targets.

Scientific and technological progress makes it possible substantially to automate accomplishment of this entire complex of tasks, not only in

separate elements but also on the scale of coalition air defense. An example of this is the SAGE semiautomatic ground environment system, employed in the NORAD air defense system. This system, however, is designed only for antiaircraft defense (to down attacking aircraft and air-ground winged missiles). This system has become substantially obsolete and possesses a number of disadvantages. These include unwieldiness, an insufficient degree of invulnerability and reliability, large number of required operating personnel, limited situation display capability, etc. Certain elements are being modernized in order to increase the effectiveness of the system. Improvement of control stability is the aim of the so-called BUIC backup system and several mobile tactical systems which can be used to reestablish disrupted control or to set up control in new areas.

In the joint air defense system of the Western European NATO nations the NADGE semiautomatic control system is being set up, an improved version of SAGE; NADGE is scheduled to become operational at the end of 1971. Judging from published information abroad, it will encompass the territory of 14 nations and include a large number of control centers echeloned parallel with and perpendicular to the front, including air defense sector and region operations centers, as well as a main coalition air defense center.

The NADGE system provides display of the air situation at operations centers, situation analysis (target identification and prediction of target movement), determination of force requirements for intercept, guidance to target, and other tasks. At the present time this system is in the deployment stage. Four primary control centers were built and put into operation in 1969: two in the FRG and one each in the Netherlands and Belgium. At the same time a center for programming and training of programmer specialists and computer operators was set up in Belgium. In mid-1970 the equipment of an additional five new ground centers was turned over for operational testing.

The role of top-echelon strategic control entity in coalition air defense is performed by the joint system command post (operations center). At this facility information on the aerospace situation in the entire defended airspace and on the far approaches to this airspace is collected and continuously evaluated. From this facility the joint air defense command exercises operational control of subordinate forces and facilities, warns troops and appropriate entities of air attack, coordinates the operations of the air defense zone (regions) and handles strategic coordination with the armed forces branches.

Strategic control entities also include zone command posts (operations centers). These facilities, as a rule coalition in composition, perform the functions of control of air defense forces of several countries deployed in a given theater of military operations. One of their

fundamental tasks is securement of coordination with the armed forces branches situated in the theater, and in particular with ground troops and navy air defense forces and tactical fighter-bombers.

Sector command posts (operations centers) are operational-level control entities; depending on the affiliation of the troops in the sector, these facilities can be operated by personnel of one or several countries. The task of these facilities is immediate control of the actions of air defense large units which include all arms, or of separate large units and units of air defense arms (antiaircraft missile and antiaircraft artillery, fighter aviation and radar) and securement of their coordination.

At the tactical echelons (large unit, unit, subunit) there are numerous centers and command posts performing the function of immediate supervision of air target detection and identification, target designation, fighter vectoring and missile guidance.

Coordinated action with ground forces and navy air defense. Participation in coalition air defense of forces belonging to various branches and services requires considerable flexibility in organization and coordination. Overall coordination is normally carried out within the framework of a theater of military operations by the theater joint armed forces command.

In the opinion of foreign experts, coordination of the operations of forces of various subordination and affiliation is best achieved if navy air defense units and air defense units organic to ground force units are operationally subordinated to the air defense sector or zone command and if they are controlled from the sector (zone) operations center. In this case their coordination with other forces in the sector (zone) can be organized on the basis of specifying areas of responsibility and missions, as well as distributing efforts in the engagement of air attackers. Under these conditions ground troops and navy air defense forces in individual areas form as it were a coalition air defense forward echelon, supplementing and reinforcing coalition air defense with their own air surveillance capability and providing air defense cover for forces, installations, and naval forces in coastal areas. Performing these missions, ground troops and navy air defense forces also prevent an air attacker from penetrating to the coalition's interior regions. A particularly important mission of these forces is establishment in the frontier (front) zone of solid low-altitude air defense coverage, which would compel hostile aircraft to climb to a higher altitude and thus expose themselves to the threat of the most effective air defense weapons.

Forces assigned to air defense of targets in the coalition nations will in turn provide as much protection as possible to ground and naval forces, will provide control of aircraft in the ground troops and navy air defense zone of responsibility, and will inform ground troops and naval forces on the air situation.

The process of achieving operational and combat cohesion of joint air defense includes a number of measures aimed at elaborating a unified approach to accomplishing operational and combat missions, as well as mutual understanding between various command entities.

Execution of the missions of coalition air defense is practiced at large-scale exercises, including those conducted within the framework of theaters of military operations. For example, twice each year exercises code-named Coordination are held in the NATO system in the Central European Theater, exercises covering the territory of the FRG, Belgium, the Netherlands, Denmark, and part of Great Britain. Primary attention at these exercises is focused on joint actions by air defense sectors in the detection, interception and destruction of hostile aircraft in various situations, particularly at low altitudes. Every year air defense sector competitions are held in this theater to determine the performance of control centers and units.

It is considered expedient to combine air defense and air force exercises. For example, NATO military aircraft operating from adjoining theaters are utilized in exercises as targets for air defense troops of the Central European Theater. NORAD air defense training sees extensive combining of air defense exercises with SAC exercises. At the beginning of the sixties, for example, U.S. and Canadian joint air defense forces held an exercise code-named Sky Shield. This exercise covered the territory of the United States, Canada, Alaska, Greenland and Iceland, as well as coastal waters up to 300 km out. All air defense forces, including National Guard fighter aircraft, took part on the side of the defending force.

Troop exercises are also used to determine weak points in an air defense system and problems cropping up in connection with changes in the methods and means of air attack.

One form of joint training is mutual exchange between countries of fighter subunits in order to familiarize them with operations and navigation in various regions in which they may be operating during military operations. Establishment of personal contact among flight personnel is also important. Such an exchange is practiced on a regular basis among the NATO nations. Aviation subunits, visiting new airfields together with ground support personnel, participate in routine combat training involving practical training missions, bombing practice and mock aerial combat.

Common gunnery ranges and training centers are in some cases established on the basis of formal agreements, in the interest of training the air defense troops of the allied nations. One such missile practice range, including antiaircraft missiles, has been established on the island of Crete near the South Bay Airfield by Belgium, Denmark, West Germany,

France, Greece, the Netherlands, Norway, and the United States.

Mutual consultation and assistance in operational and combat training by the armies with greater experience also serve the aim of strengthening coalition air defense.

Some economic and technical problems. In the process of establishing and subsequently improving a joint air defense system, the participating nations must resolve a number of specific matters connected with distribution of air defense costs, organization of joint efforts connected with system development, weapons standardization, equipping command posts, etc.

The expenditures of each country for coalition air defense can be expressed in the form of outlays for equipping and maintaining its units and large units assigned to joint air defense, and in the form of financial contributions to a common coalition fund, the size of which is determined by international agreement. For example, the NATO official annual budget, consisting of combined allocations by NATO member nations, is approximately 600 million dollars (about 25 percent of which is contributed by the United States). A portion of these funds is spent on improving Western European air defense, and in particular on construction of the NADGE system, the total cost of which is estimated at 300 million dollars. The NATO members will share in this cost as follows: the United States -- 31.8 percent, West Germany -- 19.5 France -- 11.7, Britain -- 11.2, Italy -- 5.8, Canada -- 5.1, and the other NATO member nations -- 14.9 percent.[7]

Thus as a result of air defense integration, certain components become the common property of the coalition; operation and maintenance also require shared participation. This leads to the necessity of settling such matters on an intergovernmental level.

Joint air defense development efforts in many cases include an extraordinarily broad range of measures, for the management and coordination of which an extremely complex organization is required. This applies first and foremost to the establishment of automated control systems encompassing all echelons of the combined air defense system, which requires multilateral cooperation by a number of countries and coordinated utilization of their scientific-technological and industrial potential. We can again cite the NADGE system as an example. As noted above, it calls for replacement or modernization in a number of countries of obsolete control centers and radar sites, with the furnishing of new equipment, including new radars and computers. This requires the construction of approximately 200 special buildings and the manufacture of more than 5000 extremely complex instruments and equipment. Cooperation of the NATO member nations in the

NADGE program constitutes a rather complex pattern of cooperative manufacture of special equipment, on-site construction of facilities, their equipment and manning with qualified personnel.

A special company has been established to implement the NADGE program -- Nadgeco (its management staff totals approximately 350), which involves the major electronic firms of Great Britain, West Germany, France, Italy, and the Netherlands, and is headed by Hughes Aircraft, a U.S. company. This concern coordinates the activities of 40 construction firms involved in building the NADGE system, 135 firms supplying construction materials, and 140 suppliers of instrumentation and equipment, and is responsible to the top-level NATO military-political bodies for completion of the program.

Weapons standardization on the scale of a military coalition is extremely important for all armed forces branches, but it is particularly essential for a combined air defense system, since all its elements are a component part of an extremely complex, unified military organism which must function with extreme precision and without a malfunction. The equipping of troops with more or less standard and interchangeable types of weapons and military hardware makes it possible to simplify supply to a maximum degree and to maintain subunits, units and equipment at a high level of combat readiness, as well as facilitating maintenance, repair and updating. With the adoption of approximately identical weapons it also becomes possible economically to utilize available production capacity and, which is particularly important for combined air defense, to create conditions for organizing joint control and elaboration of common methods of training and conduct of combat operations.

Standardization within air defense formations, along with transition of troops to relatively uniform weapons, requires the establishment of a certain uniformity in organization and equipping of command posts, standardization of combat documents, uniform staff structure of units and subunits. Standardization extends to some degree to field manuals and field service regulations, forms and methods of combat and operational training.

Since standardization is an important element in overall coalition military-technical policy, a coalition body is usually established to administer it. In NATO such a function is performed by the Committee on Standardization and its executive body, the Office of Military Standardization, which consists of representatives of the NATO member nations.

The office's teams and commissions of experts deal with problems of standardization in specified areas, including air defense.

The office's activities also include the drafting of proposals on standardization, assistance in transfer of licenses for the manufacture of weapon models adopted as standard, verification observance of standardization agreements, and organization of exchange of military technical information.

Weapon models approved by the office, following suitable agreements with the governments of the NATO nations, are approved as standard, and those countries which are parties to the agreement pledge to adopt these weapons.

A most important prerequisite for weapons standardization is joint involvement in research and design projects, the establishment of common scientific centers, and coordination in developing new models of military equipment.

One example of cooperation in providing NATO nation air defense troops with standard weapons is the international corporation formed in May 1959 for the manufacture of U.S. Hawk antiaircraft missiles. The corporation includes French, West German, Italian, Belgian and Dutch companies. An agreement entered into by several NATO nations called for the joint manufacture, on U.S. license, of the Sidewinder missile, the F-104G aircraft, as well as engines and spare parts for it.

Under the conditions of the capitalist system, however, standardization is inhibited by prestige considerations on the part of individual countries and monopolies as well as by the endeavor to seek exclusive benefit from scientific and technological advances.

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Scientific and technological progress, the pace of which is continuing to accelerate, periodically alters the correlation between the capabilities of aerial offensive weapons and air defense, which leads to mutual complication of their tasks and broadening of their area of activity. During a comparatively brief period of time air defense abroad has passed through several stages of development in this respect. Initially it was limited to the defense of separate sites and installations, subsequently becoming zonal defense, covering a nation's most important regions, while later its area of responsiblity extended to the entire country (territorial air defense); finally integrated air defense systems appeared, protecting the territory of a number of nations on a military coalition scale. The forming of coalition systems signifies a qualitative leap forward in the development of air defense. As a result it has acquired a number of new properties, while it is believed that its general capability against air attack has become greater than the overall capability of the air defense

forces within the coalition if they were performing their missions independently.

Coalition air defense is a characteristic feature of military and political integration. As an expression of new trends and patterns in the development of military affairs, it merits constant attention and a thorough study.

FOOTNOTES

1. Coalition air defense may also include a space surveillance system, as is the case in the NORAD unified air defense system.

2. According to information in the U.S. press, below-the-horizon radars and satellites are employed to extend missile attack warning time in the early warning system. It is reported that their employment makes it possible to detect ballistic missiles at the moment of launch, and to detect low-orbit offensive satellites (altitude of 160 km) 30 minutes before reaching target.

3. Wehr und Wirtschaft, November 1967.

4. Royal Air Forces Quarterly, Spring 1969.

5. Royal Air Forces Quarterly, Spring 1969; Voyennyy Zarubezhnik, No 5, 1970.

6. Voyennyy Zarubezhnik, No 7, 1968; NATO's Fifteen Nations, August-September 1968.

7. Wehrkunde, April 1970.